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ABSTRACT

The Even Start Family Literacy Program addresses the basic educational needs of parents and children of low-income families by providing a unified program of: (1) adult education and literacy programs for parents; (2) early childhood education for their children; and (3) assistance for parents to effectively promote their children's educational development. This report describes the Even Start Program at the end of the third year of its second national evaluation. Following an executive summary of the evaluation, the chapters cover: (1) principal components of the Even Start approach; (2) Even Start national evaluation, including the scope of the 1995-96 evaluation; (3) characteristics of Even Start families; (4) services provided to participants by Even Start projects; (5) extent of participation in Even Start services; (6) services provided to the neediest Even Start families; (7) educational and developmental outcomes of Even Start participants; (8) relationship of program outcomes to participant and project characteristics; and (9) resources that best support Even Start services. Among the findings noted in these sections are that: about 85% of 1995-96 enrollees had neither completed high school nor earned a GED; over half of Even Start projects were located in rural areas; across all educational components, projects commonly relied upon individualized instruction using curriculum materials externally developed by other programs; and major challenges to program implementation included improving attendance, improving participants' retention or motivation, obtaining sufficient financial resources, and obtaining adequate transportation. The report's three appendices detail Even Start legislation, provide additional data tables, and present content validity of measures used in the sample study. Contains 32 references. (HTH)

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National Evaluation of

The Even Start Family Literacy Program

1996 Interim Report

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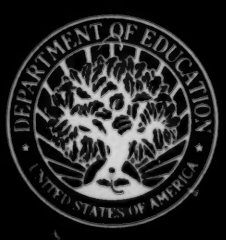

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National Evaluation of
The Even Start Family Literacy Program

1996 Interim Report

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ACKNOWLEDGMENTS

This report describes the Even Start Program at the end of the third year of the second national evaluation. It is a product of a tremendous amount of work performed by literally countless individuals throughout the 1995-96 evaluation year.

By far, the most important contributors were Even Start project directors, staff, and, in many cases, local evaluators. They collected intake information on new families, maintained participation records on all participants, and entered these data into the data collection instrument by the end of the reporting year. In addition, many state coordinators provided encouragement and assistance to their projects and the evaluation contractors in support of this effort. In all, 563 of 576 projects operating in 1995-96 submitted data by the final due date. All of their efforts are deeply appreciated.

A special recognition is extended to the projects that continued to participate in the Sample Study. In addition to the data that all projects collected, these projects administered follow-up assessment tests to families participating in the Sample Study. These data were needed to address the questions concerning program effectiveness.

This four-year evaluation is a complex undertaking involving many different tasks. During the 1995-96 program year, as in the previous years, the U.S. Department of Education staff continued to provide valuable guidance and support to the evaluation contractors. For the accomplishment of evaluation tasks this year, special thanks are due to Tracy Rimdzius (the Contracting Officer's Technical Representative) and Valena Plisko of Planning and Evaluation Service; and Patricia McKee, DonnaMarie Marlow, and Wei-min Wang of the Office of Elementary and Secondary Education.

This evaluation is conducted by two consulting firms: Fu Associates, Ltd., the prime contractor, and Abt Associates Inc., the subcontractor. In 1995-96, the major contributors to the Fu Associates team, headed by Fumiyo Tao, were: Christine Arriola, Sherry Khan, Tommy Lo, Bonnie Silsby, Denise Stakem, Amy Stock, Hope Tarr, and Marlene Walker. Their tireless effort in assisting local projects with data collection; collecting, processing, and analyzing data; and preparing this report allowed us to complete the 1995-96 evaluation successfully.

Key staff of the Abt Associates team, headed by Beth Gamse, were: Lynne Geitz, Marjorie Levin, Robert St.Pierre, and Janet Swartz. In addition to participating in all components of the Universe Study, Abt staff played the leading role in the special studies of the Migrant Education and tribal Even Start projects and the Sample Study.

EXECUTIVE SUMMARY

The Even Start Family Literacy Program addresses the basic educational needs of parents and children of low-income families by providing a unified program of (1) adult education and literacy programs for parents; (2) early childhood education for their children; and (3) assistance for parents to effectively promote their children's educational development. All Even Start projects are required to provide services in each of three "core" areas corresponding to the broad programmatic goals of Even Start: adult education and literacy; parenting education; and early childhood education. Projects provide direct support for services and also build on existing community resources by collaborating with other service providers.

The Even Start program was initially authorized by the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 (P.L. 100-297) and amended by the National Literacy Act of 1991 (P.L. 102-73). In 1994, the Even Start program was reauthorized by the Improving America's Schools Act as Part B of Title I of the ESEA (P.L. 103-382).

Even Start was first implemented as a federally-administered program in fiscal 1989. Since 1992, the program has been primarily state administered. The states award subgrants to partnerships, each consisting of at least one local education agency (LEA) and at least one community-based organization, institution of higher education, or other public or private non-profit agency. A few types of projects remain under federal administration, including special set-aside programs for migrant families, Indian tribes and tribal organizations, and insular areas; discretionary grants for statewide family literacy initiatives; and a family literacy project in a prison that houses women and their preschool-aged children. Since 1989, the program has grown from 76 projects serving approximately 2,500 families to 576 local projects serving approximately 31,500 families in 1995-96.

THE NATIONAL EVALUATION

Two types of evaluation are required of all Even Start projects by law. In addition to an independent local evaluation arranged for by each project, the law requires the U.S. Department of Education to conduct a national evaluation. The first national evaluation documented the program's early development from 1989 through 1993. The current national evaluation, covering the next four program years from 1993 through 1997, addresses these questions:

- Who is served by the program and what services do they receive? Is the program reaching the appropriate target population?
- How is the federal funding spent on the program? How are Even Start services implemented?

- How well does the Even Start basic model work? What educational and developmental gains are achieved by program participants?
- What are the characteristics of effective practices and programs?

The evaluation data collected each year are reported annually in interim reports. These reports are primarily descriptive and are intended to provide *interim* updates on the characteristics of program participants, the nature and extent of services delivered, implementation problems, and measures of educational outcomes. The final report will incorporate findings from the entire four-year period as well as from the previous evaluation to present a more comprehensive discussion of evaluation outcomes pertinent to program policies and operations.

This interim report focuses on the 1995-96 evaluation data. The findings described throughout this report draw from two sources: (1) the Universe Study, in which all projects annually submit data on program implementation, intake interviews of *new* enrollees, and services received during the year by all participants; and (2) the Sample Study, which collects data on program outcomes from a sample of fifty seven projects.[1] For the Universe Study, 563 (98 percent) of the 576 projects operating in 1995-96 returned evaluation data by the final due date. Of the fifty-seven projects in the Sample Study, fifty-four projects (95 percent) submitted outcome assessment data.

The interim and final reports resulting from the national evaluation summarize information reported by individual Even Start projects. They are intended to inform the decisions made by service providers and local, state, and federal officials to make the most effective use of available resources in their efforts toward program enhancement.

EVEN START PARTICIPANTS

Even Start is designed to serve low-income families with parents who have low levels of adult basic and/or literacy skills. To participate in Even Start in 1995-96, a family had to have (a) a parent who was eligible for adult education services under the Adult Education Act and (b) a child younger than 8 years of age. Beginning in 1995-96, teen parents, who previously were not eligible for adult education services because of their age or school attendance, also became eligible for Even Start.

Consistent with the purpose of the program, Even Start projects are serving families who are disadvantaged economically and educationally. In 1995-96, a large majority of families enrolling in Even Start had incomes substantially below the federal poverty levels (e.g., $15,911 for a family of four with two children in 1996). A majority of parents were without high school diplomas or General Education Development (GED) certificates at the time of enrollment in

[1] Exhibit 2.1 in Chapter 2 summarizes the components of the current evaluation and data collected in each component.

Even Start. Less than one-third of parents were employed, and about one-quarter had limited or no English language proficiency.

Family Characteristics

In the 1995-96 program year, approximately 31,500 families, comprising 36,400 parents and 47,800 children, participated in Even Start across 576 projects, based upon data submitted by 98 percent of all projects. The average age of adult participants in 1995-96 was 28 years, one year younger than in the previous year. This reflects an increase in the enrollment of teen parents from 9 percent in 1994-95 to 15 percent among the 1995-96 new enrollees. The average age of Even Start children in 1995-96 (3.8 years) also was below the previous year (4.4 years); 36 percent of children who enrolled in 1995-96 were under 3 years old.

As in the previous year, the average size of Even Start families was between five and six persons in 1995-96. The typical Even Start family was a couple between the ages of 20 and 39, with three to four children. Another large group of families was headed by single parents with four children.

Family Income and Employment Status

More than 80 percent of Even Start families in the last two program years had annual incomes under $15,000; 42 percent of 1995-96 enrollees earned and/or received annual incomes under $6,000. These incomes were substantially below the federal poverty level, considering that the average Even Start family included five to six persons.

Employment wages constituted the primary source of income for 46 percent of the families who enrolled in 1995-96. However, 47 percent of families had incomes low enough to qualify for and rely primarily on government assistance. The proportion of parents receiving government assistance at the time of enrollment has increased substantially, from 43 percent to 53 percent, since 1994-95. More than 60 percent of teen parents were receiving government assistance at the time of enrollment, compared with 49 percent of parents over 20 years old. Only 23 percent of participating parents were employed at the time of intake in 1995-96. Of these, slightly more than half had full-time jobs; 44 percent had part-time jobs.

Parents' Educational Backgrounds and Reasons for Participation

While it was rare that parents had had no formal schooling, nearly one-third (30 percent) of new 1995-96 enrollees had not gone beyond 7th to 9th grade. Further, 12 percent of new enrollees had not progressed beyond the primary school grades. About 85 percent of 1995-96 enrollees had neither completed high school nor earned a GED.

For roughly 60 percent of Even Start parents, Even Start represented their first experience with adult education programs. Similarly, only a small percentage had participated in employment or vocational training either before or at the time

of enrolling in Even Start. Fifty-seven percent of children enrolling in 1995-96 had received no early childhood education services prior to Even Start, but this may well reflect the fact that over one-third of these children who were new to Even Start were under 3 years of age. Even Start was the only program providing educational services to 50 percent of new children *at the time of enrollment*.

When asked for the primary reason for enrolling in Even Start, the most frequently cited explanation by parents was to improve their own educational status. Parents next listed the desire to learn English, followed by improving their child's chances for academic success.

Parents' Race/Ethnicity and English Proficiency

Even Start families represent a wide spectrum of racial/ethnic backgrounds. Since 1992-93, the proportion of Hispanic families in Even Start has increased substantially, reaching 38 percent among new families that enrolled in 1995-96. The second largest minority group was African American (23 percent). Asian, American Indian, and other groups collectively constituted 8 percent of the 1995-96 enrollees.

More than one-third (38 percent) of *new families enrolling in 1995-96* were headed by parents who did not speak English at home. Most of these parents had difficulties in understanding, speaking, and/or reading English (roughly 30 percent of *new enrollees*). The Hispanic and Asian parents' educational experiences averaged between the 8th and 9th grades, with most of their schooling completed outside the United States.

Extent of Need Among Even Start Families

Multiple disadvantages characterize most Even Start families. The neediest families participating in 1995-96 were identified based on the following seven indicators:[2]

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[2] The percentages of families identified as having each of the seven need indicators are shown in parentheses (the percentages refer to *all 1995-96 participating families*). Some need indicators are based on data collected at individual adult and child levels, summarized to the family level for families with multiple adults and children participating (i.e., *at least one adult or one child* reported the "need" condition). Further, the need index for "families receiving welfare" was based on answers to *either one of two questions* related to receipt of welfare. Due to these steps taken in creating the need index variables, some of the *family percentages* differ from percentages reported elsewhere in this report for *adults*, *children*, and *one variable at a time*.

1) Families with annual incomes under $12,000 (71 percent of families);

2) Families in which at least one participating parent has a 9th-grade or lower education (47 percent of families);

3) Families relying on government assistance as the primary source of income and/or receiving government assistance at the time of enrollment (61 percent of families);

4) Families headed by parents for whom it was difficult or who were unable to read, speak, or understand English (32 percent *of all 1995-96 participating families*);

5) Families headed by single parents (38 percent);

6) Families with four or more children under the age of 16 (42 percent); and

7) Families in which at least one participating child has a disability (e.g., speech/language impairment, visual impairment, mental retardation, or learning disability) (15 percent).

Projects are required to recruit and serve families most in need of Even Start services in their communities. While the general level of need is likely to vary in different communities, the average Even Start family had three of the seven need indicators. Forty-two percent of all families had four or more need indicators and were identified as "very needy families" for the purposes of analysis. In other words, more than 40 percent of Even Start families experienced four or more of the following circumstances: being a single parent; having 9th-grade or lower education, limited English proficiency, annual income below $12,000; receiving government assistance; and/or raising four or more children, one of whom may have a disability.

As a point of comparison, the 1996 federal poverty level for a family of four with two children was an annual income of $15,911. Many Even Start families have incomes far below $12,000 and have no educational experience beyond primary school. Thus, Even Start projects are indeed recruiting and serving very needy families with multiple disadvantages.

EVEN START SERVICES

In 1995-96, over half of the Even Start projects were located in rural areas; 35 percent were in urban areas. In many communities, adult education as well as early childhood education programs for children ages 3 to 5 years were available through other auspices. However, family literacy programs, educational services for infants and toddlers, and parenting education were available in fewer than half of the communities.

Participant Recruitment

Even Start projects are required to recruit families most in need of Even Start services. The need assessment must take into account families' low income; parents' limited educational experience, literacy skills, and/or English-language proficiency; and any other disadvantages that may exacerbate the families' economic and educational needs.

In general, projects used a wide variety of recruitment methods. Compared to newer project sites, the project sites with four or more years of experience employed more labor-intensive, personalized recruitment strategies such as telephone contacts, home visits, and "walking the neighborhood."

In recruiting participants, many projects target families with specific characteristics and needs. Criteria most often used for targeted recruitment were (a) parents with no high school diploma and (b) families with preschool-aged children. In 1995-96, the proportion of project sites targeting teen parents increased from 44 percent to 54 percent. On the other hand, relatively fewer projects (46 percent) used family incomes below specific levels as targeting criteria in 1995-96 compared to 1994-95 (56 percent). Judging from the pervasive poverty reported by program participants, projects may not need to specifically target low-income families in their recruitment efforts.

Even Start Curriculum

Even Start projects are required to provide participants with services in three core areas (adult basic or adult literacy education, parenting education, and early childhood education) as well as home-based instruction, parent-child joint activities, and support services. However, there is no single Even Start model. A majority of project sites designed their own educational programs, incorporating features of existing approaches.

Across all educational components, projects commonly relied upon individualized instruction using curriculum materials externally developed by other programs. Group activities were more common in English as a Second Language (ESL), parenting education, and early childhood education than in adult basic education and adult literacy classes. Parenting education classes tended to be more learner-directed than all other educational programs.

Projects reported incorporating functional literacy into their adult education programs more frequently in 1995-96 than in 1994-95, especially for intermediate and secondary level classes. Life skills and parenting topics were commonly used as contexts for adult education instruction, paralleling previous findings. The use of vocational topics in adult education increased slightly from the previous year.

Parenting education was largely child focused. Topics covered by a majority of projects were: child development; the development of language and thinking, motor, and social skills; and ways to ensure a child's safety and well-being. Almost all projects included parent-child literacy activities as part of their parenting education curriculum.

Parent-child joint activities played an essential role in parenting and early childhood education. On average, in 1995-96 a family was offered three hours per month of structured parent-child activities through home visits; nine hours in a center-based environment; and five hours of special events such as field trips. Topics addressed through these activities included: reading and storytelling; language development exercises; child's social development, independence, self-discipline, and self-help skills; health and nutrition; early academic skills; arts and crafts; sensory stimulation; and gross motor skills.

The integration of instructional activities across the three core service areas is one of the key elements of Even Start. Parenting and early childhood education, as well as parenting and adult education, were most commonly integrated, usually through parent-child joint activities.

To facilitate families' participation in Even Start educational activities, projects provided a wide range of support services, either directly or through referrals. The support services most often received by Even Start parents and children were child care, transportation, family support (e.g., counseling and support groups), and meals.

AMOUNT OF EDUCATIONAL SERVICES OFFERED

The hours of instructional services offered over the course of a program year by Even Start have increased over the three years from program year 1993-94 to 1995-96. The hours of services offered in 1995-96 have increased by approximately three hours per month since 1994-95 for adult and early childhood education and by approximately one hour per month for parent-child joint activities.[3] In 1995-96, on average, 325 to 404 hours of adult education and 201 hours of parenting education were offered per year per parent, depending on academic levels. Hours offered in early childhood education ranged from 391 to 609 per year per child, depending on age groups.

Reflecting the increased enrollment of teen parents, the percentage of project sites offering services to infants and toddlers has increased from 71 percent to 89 percent since 1994-95, and the hours of instructional activities for infants and toddlers increased from an average of 350 hours per year to 391. Project sites with higher percentages of teen parents offered more instructional hours in all core service areas than sites with fewer teen parents. Project sites serving high percentages of very needy families (with four or more of the seven need indicators) offered substantially more instructional activities than sites with lower percentages of very needy families.

As expected, mature projects with four or more years of experience offered substantially more hours of service than the first-year projects across all

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[3] The hours offered for parenting education have remained relatively constant since 1993-94. Throughout this report, notable changes over time are described, while data that were fairly stable over time are mentioned only when the stability is noteworthy.

educational components. The differences due to project experience were most prominent in the service areas of beginning adult education and ESL, where mature project sites offered sixty-nine and 109 more hours per year, respectively, than did first-year projects.

EXTENT OF PARTICIPATION BY FAMILIES

It is important to distinguish between services offered by projects and participants' rates of participation. In 1995-96, 85 percent of Even Start parents participated in adult education, for an annual average of 114 hours per participant. This translates into between eleven and twelve hours per month when calculated on a ten-month educational calendar. Teen parents were the most active participants in adult education programs (147 hours average), a dramatic increase from the previous program year (ninety-one hours average). Adult secondary education, GED preparation, and ESL were the most commonly attended adult education programs.

In 1995-96, 88 percent of parents participated in parenting education, receiving an annual average of twenty-seven hours of instruction. Older parents spent more time in parenting education than teen parents.

Ninety-five percent of children participated in early childhood education services, most commonly in organized, center-based programs and individualized, home-based programs. Other types of programs attended by substantially smaller percentages (approximately 20 percent) of children included Even Start services coordinated with compulsory education programs and day care services offering educational activities. (Of the 5 percent of the children who did not participate in early childhood education, 80 percent were eligible according to age criteria, but they may well have enrolled in the program shortly before the evaluation reporting deadlines.) Nearly one-third of children participated for only one to three months (including children who enrolled close to the end of the evaluation year). About one-fourth of children participated for ten to twelve months. The majority of participating children attended most of the time while they were participating.

The number of hours of participation by parents was directly related to the number of instructional hours projects provided. Parents enrolled in projects that provided more than 453 hours per year of adult education participated substantially more (139 hours per year) in adult education services than parents in projects offering 240 or fewer instructional hours. (The top 25 percent of projects offered 453 or more hours of adult education per year; the bottom 50 percent offered 240 or fewer hours.) Similarly, parents in projects offering more than 240 hours of parenting education (top 25 percent of projects) spent more hours in parenting education—an average of forty-two hours—than parents in projects offering fewer hours of parenting education.

Retention and Reasons for Leaving

Sixty percent of families new to Even Start in 1995-96 were retained at the end of the year; 6 percent had completed their educational goals and left the program. Thus, approximately two-thirds of families continued participation or had successfully completed the program.

Families headed by parents with very low or very high educational backgrounds had higher rates of retention/completion than families in which parents had intermediate or some high school education. A higher percentage of families with parents in their 30s and 40s were continuing or had completed their goals compared to families with younger parents. Fourteen percent of families terminated due to a combination of factors such as poor attendance, lack of interest, and family problems.

Services Provided to the Neediest of Even Start Families

Despite their multiple disadvantages, the very needy families (those having four or more of the seven need indicators) participated in Even Start educational services as much as, or more than, the less needy families. A slightly higher percentage of very needy families participated in all three core services (77 percent to 79 percent) than families with zero to two needs (75 percent). Further, parents in very needy families spent substantially more hours in adult and parenting education than did parents in families with two or fewer need indicators. Children in very needy families participated in early childhood education as much as their peers from less needy families.

However, at the end of the 1995-96 program year, a larger percentage of less needy families were still enrolled or had completed their goals (71 percent) compared to very needy families (66 percent).

Resources Supporting Even Start Services

The patterns of funding at the project level appear to be shifting toward increasing contributions of local funds supporting Even Start services. This is consistent with the legislation, which stipulates that the portion of the total budget supported by Even Start funds must decrease 10 percent each year. This means that the non-Even Start ("local") matching funds must increase correspondingly and constitute at least 40 percent of annual operating budget by year four. Further, projects that receive a subsequent grant or grants must obtain at least 50 percent of their budget from local sources in all years of these grants. Aside from funding patterns, many aspects of program operations have remained largely unchanged over the past several years, including project staffing, interagency collaboration, and issues that present challenges for program implementation.

PROGRAM FUNDING

With all federal, state, and local resources combined, the average annual budget for Even Start projects in 1995-96 was $245,273, nearly $19,000 per project less than in the previous program year. However, based on data reported by 84 percent of all projects, the average project in 1995-96 received $108,718 in local contributions, $21,557 more than the 1994-95 average of $87,161.

With all types of funds combined, the amount that projects spent per family has increased each year since 1993-94, from $3,709 in 1993-94 to $4,438 in 1995-96. Further, focusing only on the federal share, the dollar amount spent per family has remained remarkably stable at approximately $2,700 across the three years.

These results seem to reflect, at least in part, the combined effects of two trends: (1) a slight reduction in the average number of families served by each project (from sixty per project in 1994-95 to fifty-five in 1995-96) and (2) an apparent increase in the amount of local contributions. The smaller project size is consistent with reports from many project directors that they are devoting greater efforts and resources per family to enhance program effectiveness, rather than simply increasing the number of participants. The increase in the local contributions also seems consistent with a larger number of projects receiving the second four-year grants and supporting at least 50 percent of their budget with local matching funds. In 1995-96, roughly 37 percent of projects were in their second grant cycle.

In submitting fiscal data for the national evaluation, some projects may have underreported the amount of local contributions due to omissions of some in-kind resources. However, the apparent shifts in the relative shares of federal and local funds and the increasing per-family budget also may reflect a gradual maturing of Even Start both programmatically and in conformance with the legislation.

EVEN START STAFF

The staff composition of Even Start projects has not changed appreciably since 1993-94. The average project in 1995-96 had a staff of ten Even Start-paid persons that included one project administrator, three to four teachers, one to two teachers' aides, one family specialist, one support service provider, one evaluator, and one administrative support person. Seventy-eight percent of the Even Start-paid instructors had at least a bachelor's degree; 25 percent had a master's degree. Ninety-four percent of aides had at least a high school diploma or GED, and 10 percent had a four-year degree. Over half of all Even Start instructors had six or more years of teaching experience. On average, in 1995-96, Even Start staff received five to eight days of inservice training, depending on job category.

INTERAGENCY COLLABORATION

Even Start is intended to serve as the "glue" that facilitates coordination of existing services and resources in the community to provide education to low-income families. Projects are succeeding in developing a wide network of collaborative arrangements. The contribution of collaborating agencies in Even Start instructional programs was most prominent in adult education. For approximately one-third of project sites, collaborating agencies were solely responsible for providing educational services in all levels of adult education; Even Start and collaborating agency staff shared responsibilities in about one-quarter of project sites. Public school departments (other than the specific departments sponsoring Even Start) on one hand, and colleges and universities on the other, served as primary providers of adult education services for 35 percent and 19 percent of project sites, respectively.

For parenting education services, which are less commonly available than adult education programs in most communities, a majority (63 percent) of project sites relied solely on Even Start staff to deliver services. Agencies serving as secondary providers of parenting education included: community groups (56 percent); public school departments (51 percent); government agencies (51 percent); and Head Start (49 percent).

Even Start resources were used exclusively for serving infants and toddlers in 68 percent of project sites, while collaborating agencies played a greater role in serving older children. Some projects relied on instructors from public school departments (34 percent), Head Start (24 percent), and other preschool and daycare programs (17 percent) as primary service providers.

Thus, while a variety of agencies and organizations collaborate with Even Start projects, Even Start staff tend to provide direct services in educational areas that are less frequently served by other sources in the community. Project directors have reported high levels of satisfaction with their collaborative arrangements since 1993-94.

CHALLENGES IN PROGRAM IMPLEMENTATION

As in the previous two years, the major challenges to program implementation were improving attendance; improving participants' retention or motivation; obtaining sufficient financial resources; and obtaining adequate transportation.

The two areas for which the projects indicated a great need for technical assistance were funding or fiscal issues and increasing participant involvement and retention. More than half the projects experienced some need for technical assistance in areas such as staff development; increasing participant involvement and retention; funding; balancing program resources between educational and support services; and handling the social or health problems of participants.

EDUCATIONAL AND DEVELOPMENTAL OUTCOMES OF EVEN START

The purpose of the Sample Study is to relate participation in Even Start services to specific, measurable educational and developmental outcomes for both adults and children. As in the first evaluation, the Sample Study measures three types of educational/developmental outcomes: child cognitive development, adult education, and parenting. However, the second evaluation does not include a control group, and program outcomes are assessed in terms of the differences between participants' pretest (i.e., pre-Even Start) and posttest scores on a battery of standardized tests.

The outcomes for Even Start participants are based primarily upon data from those participants who remained in Even Start long enough to participate in at least two rounds of data collection.[4] When we contrasted demographic and other characteristics of families for those with only pretest data versus those with both pretest and posttest data, however, we observed systematic differences between the two groups. Essentially, families with more complete data are more likely, on average, to be employed, have higher incomes, speak languages other than English at home, and have completed more schooling. *This means that the results we describe in this report—based upon participants who remain in the program—are biased. This critical caveat should be held in mind when reviewing the discussions about educational and developmental outcomes.*

In the domain of child cognitive development, children in both the first and current evaluation achieved significant gains on the PreSchool Inventory (PSI), a test for school readiness skills. We report gains in standard deviation units in order to describe the relative magnitude of gains between pretests and posttests across different outcome measures. The standard deviation provides a measure of the variability of the distribution of scores on a particular measure (e.g., whether the scores vary widely across the full range of possible scores or whether the scores are clustered more tightly). The standardized gain score is calculated by dividing the gain score (or the difference between the pretest and posttest) by the standard deviation of the pretest.

Across both the 1994-95 and 1995-96 program years, Even Start children gained nearly one standard deviation in the approximately six months between pretest and posttest assessments. Even Start children in 1994-95 and 1995-96 also made significant gains, slightly over half of a standard deviation, on the Preschool Language Scale-3 (PLS-3) used to measure language development.

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[4] For the purposes of characterizing baseline status on several outcome measures, however, we do report pretest or entry scores for participants for whom we may not necessarily have posttest or followup scores. This allows us to estimate the degree of comparability between participants who do and do not remain in the Even Start program.

The educational progress for adults was more moderate, on average, than gains observed for the children participating in Even Start. Adults were assessed with either the Comprehensive Adult Student Assessment System (CASAS) or the Tests of Adult Basic Education (TABE) in both reading and math subject areas. Across both the 1994-95 and 1995-96 program years, adults made gains on these measures. For those assessed with the CASAS, the standardized gain score from pretest to posttest was .24 for reading, and .44 for math. For those assessed with the TABE, the standardized gain score was approximately .25 for both reading and math. The gains observed on the CASAS are comparable to those in the first national evaluation of Even Start and in other adult education programs. (The TABE was not used in the first four-year evaluation of Even Start.) Approximately 10 percent each of adults in the Universe and Sample Study attained a GED certificate while participating in Even Start.

In addition to educational assessments for children and adults, the outcomes included a measure of the home environment, called the Home Observation for Measurement of the Environment (HOME) Screening Questionnaire. The HOME measures the quality of cognitive stimulation and emotional support provided to the child(ren) by the family. Parent posttest scores on the HOME Screening Questionnaire (HSQ) showed moderate gains for parents of children in two age groups: those with children from birth to 3 years of age and those with children between 3 and 6 years of age.

While the second Even Start evaluation does not include a control group, a control group of low-income families participating in a national evaluation of another federally-funded "two-generation, family support" program showed no change in HSQ scores over time. This finding suggests that there is no "normal" or "developmental" growth associated with this measure. This further suggests that the positive changes seen among Even Start families are due to the program rather than to other factors.

Additionally, the Sample Study component of the second evaluation, unlike the In-Depth Study (IDS) component of the first evaluation, depends upon local projects to administer child and adult tests and collect and submit data on outcome measures. Sample Study project staff were initially trained in August and September of 1994. Although there have been no other meetings for the Sample Study projects, the projects received refresher training manuals in September 1995 and September 1996. While many projects have worked hard to ensure that annual data submissions are completed and accurate, the quality of data submitted by the local projects has been extremely variable. We believe this is due to a combination of factors, including changes in testing and administrative personnel at the project level. **As a result, we believe we must interpret our findings with considerable caution because the data may not reflect participants' performance as accurately as we had hoped.*

Also, the Sample Study, like the IDS, was intended to collect data at three points in time: at pretest, at posttest (at the end of a participant's first full program year), and at another posttest at the conclusion of the following program year, in order to assess the impact of participation in Even Start over a longer time period. What we have learned, however, is that most participants in the Sample

Study participate in Even Start long enough for project staff to collect at least pretest data and often posttest data, but only about 10 percent of the Sample Study participants are still enrolled in Even Start at the time of the second posttest. As a result, while we can assess changes in performance from pretest to the first posttest for a majority of Sample Study participants, our estimates of changes from the pretest to the second posttest are based upon a potentially biased subsample of participants (e.g., those 10 percent or so of participants still enrolled in the program).

FACTORS ASSOCIATED WITH PROGRAM OUTCOMES

Over the past two years, we have collected data on a number of outcome measures for children and adults participating in Even Start. The overall results reflect the same trend from year to year: on average, participants make gains from pretest to posttest, and the observed gains for children are larger than those for adults. This is consistent with what has been found in other studies.

What is more puzzling, however, is that the relationships between the amount of instruction received, participant and project characteristics, and outcome measures indicate few clear trends or directions. In the first national evaluation, for example, there was an observed relationship between service intensity and educational outcomes for children and adults (e.g., the greater the level of participation in Even Start services, the greater the increase in children's gains on the the PPVT). During the first year of the current national evaluation, while there were some relationships between service intensity, such as hours of adults education or parenting education, and outcomes such as adult scores on the CASAS, TABE (math only), or the HSQ, the data from the 1995-96 program year, however, do not indicate any consistent relationship between service intensity and educational outcomes. Because the relationships are inconclusive and in fact differ somewhat across years, we can only report that despite the gains participants clearly made on all the outcome measures, the reasons for those gains have yet to be explained.

CONCLUSIONS

The 1995-96 national evaluation of the Even Start program confirmed that many characteristics of program participants and program operations have stabilized over the last several years. At the same time, in the generally familiar patterns of findings, there are signs of changes that may unfold in the coming years. The evaluation findings point to areas in which projects are making visible progress as well as issues that call for continued effort and improvement.

The most important mandate for the program is to serve the families most in need of its family educational services. The annual evaluations have repeatedly confirmed that Even Start serves highly disadvantaged families. In addition, there are indications that the need levels of participants may be increasing.

Compared to prior years, for example, a larger percentage of the 1995-96 enrollees were receiving government assistance.

Another trend is the increasing enrollment of teen parents. Many teen parents live in extended families and may have the economic and social support that extended families could provide. At the same time, many of them are single parents, lack a high school diploma, and have limited experience as self-sufficient adults. The extended households of many teen parents may pose a new challenge to provide educational services that account for the strengths and difficulties associated with three-generation families.

The evaluation revealed several signs that projects are striving to respond to the changes in participant profiles and needs as well as to the shifting political and programmatic environments. With the increase in the number of projects targeting teen parents, a large majority now are offering educational programs for infants and toddlers. This level of early childhood education is not commonly available in most communities, and Even Start clearly fills a need for infant and toddler services in many projects' communities.

For the past three years, the levels of educational services offered to Even Start families have increased in all service areas. In 1995-96, more projects were incorporating vocational education materials in their adult education curricula than in earlier years. Moreover, projects with higher percentages of very needy families and/or teen parents offer substantially more hours of educational services compared to other projects. In response, the very needy families tend to participate in these services as much as or more than less needy families, despite their multiple disadvantages. Teen parents are also the most active participants in adult education.

Although the projects are succeeding in recruiting and serving some of the most at-risk families in their communities, the retention/completion rates of very needy families and teen parents lag slightly behind other Even Start families. As in other educational programs targeting low-income learners, participant motivation and retention are two of the most difficult challenges in Even Start service delivery. The rates of unsuccessful termination from the program were higher among the very needy families and families with teen parents.

As welfare reform initiatives are implemented across the nation, the demands and expectations placed on Even Start and other family education programs may grow. Even Start may become an avenue for families to end long-term dependence on government assistance. On the other hand, welfare reform could discourage enrollment by families eligible for Even Start. The urgency to find and keep employment may interfere with or even prevent some families from pursuing long-term goals of family literacy programs. The percentage of families leaving the program without completing their goals due to new employment preventing continued participation may increase. Maximizing opportunities for interagency collaboration, ensuring the availability of support services to enable the very needy families to participate, and accommodating more to the schedules and needs of working parents are areas that need continued innovation and improvements.

Some changes in project characteristics seem to reflect the overall maturation of the Even Start program as a whole. Although nearly 20 percent of all projects were in their first year of operation, almost 40 percent had four or more years of experience. The increasing percentage of mature projects contributed to sizable gains in the amount of instructional activities they offered to participants—in every level of adult, parenting, and early childhood education services. The level of services offered was greater among projects with four or more years of experience, showing a promising course of growth for new projects.

While many aspects of program operations are less developed among the first-year projects, by the time projects complete their second year, they tend to achieve a level of implementation comparable to projects with many more years of experience. The generally quick program implementation process may signal increasing efficiency and quality of technical assistance provided to new projects by state coordinators and other sources. The dynamics of factors and processes contributing to project maturation present fruitful areas for future research.

CONTENTS

Acknowledgments ..... *iii*

Executive Summary ..... *v*

Chapter 1: Introduction ***1***

The Even Start Program: Legislation and Administration 1

Principal Components of the Even Start Approach 3

Variations Upon the Basic Model 6

Organization of the Report 8

Chapter 2: Even Start National Evaluation ***9***

The First Even Start National Evaluation 9

Current National Evaluation 10

Research Questions 11

The Even Start Information System (ESIS) 13

Sample Study 14

Site Visits to Migrant Education Even Start Projects and Tribal Even Start Projects 16

Scope of the 1995-96 Evaluation 16

Universe Study 16

Sample Study 18

Statistical Analysis 20

Chapter 3: Who Are the Even Start Families? ***23***

How Many Families Were in Even Start in 1995-96? 24

What Were the Demographic Characteristics of Even Start Families? 25

Age and Gender of Participating Parents 26

Age and Gender of Participating Children 27

Family Structure and Size 28

Family Economic Status at Intake 30

Sources of Family Income 31

Parents' Employment Status at Enrollment 33

What Were the Even Start Participants' Need for Educational Services? 34

Parents' Educational Background 34

Experience with Adult Education and Employment Training 36

Racial/Ethnic Background and Length of Residence in the United States 37

ESL Parents' English Proficiency 41
Children's Participation in Non-Even Start Programs 42
How Many Children Have Special Needs? 44
Parents' Reasons for Participating in Even Start 45

Chapter 4: What Services Do Even Start Projects Provide to Participants? 47

Where Are Even Start Projects Located? 48
What Non-Even Start Services Are Available in Communities? 49
How Are Families Recruited and Screened? 50
Recruitment Strategies 52
Screening Procedures 53
What Are the Basic Designs of Even Start Educational Services? 54
Educational Approaches Used by Local Projects 54
Characteristics of Even Start Curricula 56
How Much Instructional Service Is Offered in Even Start? 59
Increases Since 1992-93 60
Levels of Services Offered to Teen Parents 62
Service Hours Offered by New and Mature Projects 64
In What Contexts Are Adult Education Services Provided? 65
What Are the Contents of Parenting Education? 66
How Are Core Educational Programs Integrated? 71
What Transitional Services Are Provided to Children Moving to Kindergarten and Primary School? 72
How Do Projects Accommodate Participants' Needs? 74
Families' Needs for Support Services 74
Flexibility of Services 75

Chapter 5: To What Extent Did Even Start Families Participate in the Services Offered? 77

How Many Home Visits Were Made to Families? 78
What Was the Extent of Participation in Adult Education? 80
Types of Adult Education Services Received 80
Hours of Participation in Adult Education 82
Group Differences in Adult Education Participation Hours 83
What Was the Extent of Participation in Parenting Education? 86
What Was the Extent of Participation in Early Childhood Education? 88
What Percentage of Families Participated in All Three Core Components? 90
What Were the Characteristics of Families That Did Not Participate in All Three Core Components? 93

Was Service Intensity Related to Participation Rates? 94
What Support Services Did Parents and Children Receive? 96
What Were the Patterns of Retention? 97
Families That Continued Participation or Completed the Program 97
Families That Exited the Program 99

Chapter 6: What Services Are Provided to the Neediest Even Start Families? 103

Working Definition of Neediest Even Start Families 104
What Are the Demographic Characteristics of the Neediest Even Start Families? 106
What Percentage of Projects Serve the Very Needy Even Start Families? 108
To What Extent Did the Very Needy Families Participate in Even Start Services? 110
Extent of Participation in Core Services 111
Year End Participation Outcomes 113

Chapter 7: What Were the Educational and Developmental Outcomes of Even Start Participants? 115

What Were the Child Development Outcomes? 117
The PreSchool Inventory 117
Preschool Language Scale (PLS-3) 122
What Were the Parenting Education Outcomes? 127
HOME Screening Questionnaire 127
What Were the Adult Education Outcomes? 131
Comprehensive Adult Student Assessment System 131
Tests of Adult Basic Education 136
What Were the Outcomes on Other Progress Indicators? 140
Attainment of a GED Certificate 140
Employment Status 142
Other Progress Indicators 143
Findings from Two Evaluations: A Detailed Review 143
Child Cognitive Development 144
Adult Literacy Development 146

Chapter 8: Do Program Outcomes Vary Depending on Participant and Project Characteristics? 151

How Do Outcomes Vary by Participant Characteristics? 152
Hours of Core Service Received 152
Hours of Core Service Between Pretest and Posttest 155
Gains on Outcome Measures by Hours of Instruction Received 157
Gains on Outcome Measures by Family Need Index 160

How Did Outcomes Vary by Project Characteristics? 160
Staff Characteristics 161
Project Size 161
Service Characteristics 162

Chapter 9: What Resources Support the Even Start Services? 165

What Organizations Operate the Even Start Program? 165
Which Funds Support the Even Start Services? 167
How Are the Even Start Services Staffed? 170
What Inservice Training Do Even Start Staff Receive? 172
Program Coordination 172
Core Educational Services 173
Other Inservice Topics Presented to Even Start Staff 176
To What Extent Do Collaborating Agencies Provide the Core Educational Services? 176
What Are Major Challenges In Implementing Even Start? 182
What Are Projects' Technical Assistance Needs? 184
Program Operations 184
Support Services 185
Educational Services 186
What Are Projects' Evaluation Activities and Future Plans? 187

References 189

Appendix A: Even Start Legislation A-1

Appendix B: Additional Data Tables B-1

Appendix C: Content Validity of Measures Used in the Sample Study C-1

LIST OF EXHIBITS

Chapter 1: Introduction

Exhibit 1.1: Even Start Conceptual Model 5

Chapter 2: Even Start National Evaluation

Exhibit 2.1: Components of the Even Start Evaluation 17

Exhibit 2.2: Number of Projects Participating in the Even Start National Evaluation: Program Years 1993-96 18

Exhibit 2.3: Number of Parents and Children in the Sample Study at Pretest and Posttest (1994-95 and 1995-96) 19

Chapter 3: Who Are the Even Start Families?

Exhibit 3.1: 1995-96 Even Start Participants (Estimated for All 576 Projects Operating in 1995-96) 23

Exhibit 3.2: Universe Study Participants (1995-96) 25

Exhibit 3.3: Percent of Parents, by Age: 1994-95 Participants and 1995-96 New Enrollees 27

Exhibit 3.4: Percent of Participating Children, by Age: 1994-95 Participants and 1995-96 New Enrollees 28

Exhibit 3.5: Percent of Families Who Enrolled in 1995-96, by Family Structure 29

Exhibit 3.6: Percent of Families Who Enrolled in 1995-96, by Number and Age of Children 30

Exhibit 3.7: Percent of Families, by Family Annual Income: 1994-95 Participants and 1995-96 New Enrollees 31

Exhibit 3.8: Percent of Families Who Enrolled in 1995-96, by Primary Source of Income 32

Exhibit 3.9: Percent of 1995-96 New Enrollees Receiving Government Assistance at the Time of Enrollment, by Parents' Age 32

Exhibit 3.10 Employment Plans of Parents Who Were Not Employed at Enrollment: 1994-95 Participants and 1995-96 New Enrollees 34

Exhibit 3.11: Percent of Parents, by Educational Background at Enrollment: 1994-95 Participants and 1995-96 New Enrollees 35

Exhibit 3.12: Percent of Parents, by Previous Adult Education Experiences: 1994-95 Participants and 1995-96 New Enrollees 36

Exhibit 3.13: Percent of Parents, by Job Training History Before and at Time of Enrolling in Even Start in 1995-96 37

Exhibit 3.14: Racial/Ethnic Backgrounds of Even Start Parents: 1992-93 Participants, 1994-95 Participants, and 1995-96 New Enrollees 38

Exhibit 3.15: Racial/Ethnic Backgrounds of Even Start Parents, by Region: 1995-96 Participants 38

Exhibit 3.16: Percent of Families Who Enrolled in 1995-96, by Family Structure and Parent Race/Ethnicity 39

Exhibit 3.17: Percent of Families Who Enrolled in 1995-96, by Race/Ethnicity and Length of Residence in the United States 39

Exhibit 3.18: Percent of Families Who Enrolled in 1995-96, by Region and Length of Residence in the United States 40

Exhibit 3.19: Percent of ESL Parents Who Enrolled in 1995-96, by English Proficiency Level 41

Exhibit 3.20: Average Years of Education Completed at Enrollment, by Parent Age and Race/Ethnicity (1995-96) 42

Exhibit 3.21: Percent of Children Participating in Non-Even Start Educational Programs Before Enrolling in Even Start: 1994-95 Participants and 1995-96 New Enrollees 43

Exhibit 3.22: Percent of Children Participating in Non-Even Start Educational Programs at Enrollment: 1994-95 Participants and 1995-96 New Enrollees 44

Exhibit 3.23: Percentage Distribution of Children with Special Needs, by Type of Needs (1995-96) 45

Exhibit 3.24: Percent of Parents, by Reason for Participating in Even Start: 1994-95 Participants and 1995-96 New Enrollees 46

Chapter 4: What Services Do Even Start Projects Provide to Participants?

Exhibit 4.1: Distribution of Projects, by Region (1995-96) 48

Exhibit 4.2: Percent of Projects Reporting Availability of Non-Even Start Educational Services in Their Communities (1995-96) 49

Exhibit 4.3: Criteria for Targeting Services to a Segment of the Eligible Population (1994-95 and 1995-96) 51

Exhibit 4.4: Percent of Project Sites Using Special Recruitment Strategies "a Great Deal," by Project Age (1995-96) 52

Exhibit 4.5: Percent of Project Sites, by Formal Steps Used "a Great Deal" in Screening Potential Participants (1995-96) 54

Exhibit 4.6: Percent of Project Sites, by "Very Influential" Sources for the Project Design and by Project Age (1995-96) 55

Exhibit 4.7: Main Source of Even Start Educational Curricula: Locally Developed versus Acquired (1995-96) 57

Exhibit 4.8: Nature of Even Start Instruction: Individualized versus Standardized (1995-96) 58

Exhibit 4.9: Nature of Even Start Instruction: Group versus Individual Focused (1995-96) 58

Exhibit 4.10: Nature of Even Start Instruction: Learner versus Instructor Selected Activities (1995-96) 59

Exhibit 4.11: Hours of Instructional Services Offered per Year per Participant in Adult and Parenting Education (1993-94, 1994-95, and 1995-96) 61

Exhibit 4.12: Hours of Instructional Services Offered per Year per Participant in Early Childhood Education (1993-94, 1994-95, and 1995-96) 62

Exhibit 4.13: Adult and Parenting Education Hours Offered per Year, by Percent of Teen Parents in Project Sites (1995-96) 63

Exhibit 4.14: Early Childhood Education Hours Offered per Year (Infants and Toddlers), by Percent of Teen Parents in Project Sites (1995-96) 63

Exhibit 4.15: Average Instructional Hours Offered per Year, by Project Age (1995-96) 65

Exhibit 4.16: Characteristics of Adult Basic Education Services (1995-96) 66

Exhibit 4.17: Percent of Project Sites Providing Child-Focused Parenting Education Activities to "Most Families" (1995-96) 67

Exhibit 4.18: Percent of Project Sites Providing Parent or Family-Focused Parenting Education Activities to "Most Families" (1995-96) 68

Exhibit 4.19: Hours per Month of Parent-Child Joint Activities Offered, by Setting (1994-95 and 1995-96) 69

Exhibit 4.20: Percent of Project Sites Offering Various Parent-Child Activities to "Most Families" (1995-96) 70

Exhibit 4.21: Percent of Project Sites, by Nature of Integration of Even Start Core Services "Always/Usually" (1995-96) 71

Exhibit 4.22: Hours per Month That Adult Education Is Combined with Parenting Education (1994-95 and 1995-96) 72

Exhibit 4.23: Transitional Services Even Start Projects Provide to Children (1995-96) 73

Exhibit 4.24: Percent of Project Sites, by Families' Need for Support Services ("All" and "Many" Families) (1995-96) 75

Exhibit 4.25: Flexibility in Scheduling of Even Start Services to Accommodate Adult Participants (1995-96) 76

Chapter 5: To What Extent Did Even Start Families Participate in the Services Offered?

Exhibit 5.1: Average Number of Home Visits per Family per Year, by Project Age (1995-96) 79

Exhibit 5.2: Average Number of Home Visits per Family per Year, by Parents' Age (1995-96) 79

Exhibit 5.3: Percent of Parents Participating in Even Start Adult Education Programs (1995-96) 80

Exhibit 5.4: Percent of Parents Participating in Adult Education Programs, by Pre-Even Start Educational Level and ESL Status (1995-96) 81

Exhibit 5.5: Annual Hours of Participation in Adult Education, by Project Age (1995-96) 83

Exhibit 5.6: Annual Hours of Participation in Adult Education, by Parents' Age (1994-95 and 1995-96) 84

Exhibit 5.7: Annual Hours of Participation in Adult Education, by Parents' Age and Educational Background (1995-96) 84

Exhibit 5.8: Annual Hours of Participation in Adult Education, by Parents' Age and Family Structure (1995-96) 85

Exhibit 5.9: Annual Hours of Participation in Parenting Education, by Parents' Age (1995-96) 87

Exhibit 5.10: Annual Hours of Participation in Parenting Education, by Project Age (1995-96) 87

Exhibit 5.11: Percent of Children Participating in Early Childhood Education Programs (1995-96) 88

Exhibit 5.12: Percent of Participating Children, by Months of Participation (1995-96) 89

Exhibit 5.13: Percent of Children Who Attended ECE Services for Ten to Twelve Months, by Age of Child in 1995-96 89

Exhibit 5.14: Percent of Participating Children, by Frequency of Absences (1995-96) 90

Exhibit 5.15: Extent of Participation in All Three Core Components (1994-95 and 1995-96) 91

Exhibit 5.16: Percent of Families Participating in All Core Components, by Project Age (1995-96) 91

Exhibit 5.17: Percent of Families Participating in All Three Core Components, by Parents' Age and Educational Background (1995-96) 92

Exhibit 5.18: Average Annual Hours of Participation in Adult Education, by Adult Education Hours Offered by Projects (1995-96) 95

Exhibit 5.19: Average Annual Hours of Participation in Parenting Education, by Parenting Education Hours Offered by Projects (1995-96) 95

Exhibit 5.20: Percent of Parents and Children Receiving Support Services (1995-96) 97

Exhibit 5.21: Percent of Families Retained or Successfully Completed Program, by Project Age (1995-96) 98

Exhibit 5.22: Percent of All Families Who Participated in 1995-96, by Reasons for Terminating Participation 99

Exhibit 5.23: Percent of Families Exiting Due to Problems, by Parents' Educational Background (1994-95 and 1995-96) 100

Exhibit 5.24: Percent of Families Exiting Due to Problems, by Parents' Age (1995-96) 101

Chapter 6: What Services Are Provided to the Neediest Even Start Families?

Exhibit 6.1: Average Need Index, by Region and Type of Community (1995-96) 107

Exhibit 6.2: Average Need Index by Racial/Ethnic Groups (1995-96 Participants) 107

Exhibit 6.3: Hours of Adult Education Offered per Year by Project Sites, by Percent of Very Needy Families They Served (1995-96) 109

Exhibit 6.4: Hours of Parenting Education Offered per Year by Project Sites, by Percent of Very Needy Families They Served (1995-96) 109

Exhibit 6.5: Hours of Early Childhood Education Offered per Year by Project Sites, by Percent of Very Needy Families They Served (1995-96) 110

Exhibit 6.6: Annual Hours of Participation in Adult and Parenting Education, by Family Need Index (1995-96) 111

Exhibit 6.7: Percent of Families Participating in All Three Core Services, by Family Need Index (1995-96) 112

Exhibit 6.8: Percent of Families, by Year End Participation Outcomes and by Family Need Index (1995-96) 113

Chapter 7: What Were the Educational and Developmental Outcomes of Even Start Participants?

Exhibit 7.1: Sample Study Participants and Assessment Schedules 117

Exhibit 7.2: PSI Pretest Scores (Raw Score from the Sample Study, 1994-95 and 1995-96) 119

Exhibit 7.3: Pretest and Posttest Scores on PSI (Raw Scores from the Sample Study, 1994-95 and 1995-96) 121

Exhibit 7.4: PLS-3 Pretest Scores (Total Language Scores from the Sample Study, 1994-95 and 1995-96) 123

Exhibit 7.5: Pretest and Posttest Scores on PLS-3 (Standard Scores from the Sample Study, 1994-95 and 1995-96) 124

Exhibit 7.6: Gain Per Month on the PLS-3 (Standard Scores from the Sample Study, 1994-95 and 1995-96) 124

Exhibit 7.7: Age-Equivalent Scores on PLS-3 at Pretest and Posttest (Raw Scores from Sample Study, 1994-95 and 1995-96) 126

Exhibit 7.8: HOME Screening Questionnaire (HSQ) Pretest Scores for Parents of Children Less Than 3 Years of Age (Raw Scores from Sample Study, 1994-95 and 1995-96) 129

Exhibit 7.9: HOME Screening Questionnaire Pretest Scores for Parents of Children Three- to Six-Years-Old (Raw Scores from Sample Study, 1994-95 and 1995-96) 129

Exhibit 7.10: Pretest and Posttest Scores on the HSQ (Raw Scores from the Sample Study, 1994-95 and 1995-96) 130

Exhibit 7.11: CASAS Reading Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 133

Exhibit 7.12: CASAS Math Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 134

Exhibit 7.13: Pretest and Posttest Scores on the CASAS (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 134

Exhibit 7.14: Pretest and Posttest Literacy Levels on CASAS Reading (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 135

Exhibit 7.15: Pretest and Posttest Literacy Levels on CASAS Math (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 135

Exhibit 7.16: TABE Reading Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 138

Exhibit 7.17: TABE Math Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 138

Exhibit 7.18: Pretest and Posttest Scores on the TABE (Scaled Scores from the Sample Study, 1994-95 and 1995-96) 139

Exhibit 7.19: Grade Equivalent Scores Corresponding to TABE Reading and Math Quartiles at Pretest and Posttest (1994-95 and 1995-96) 140

Exhibit 7:20: Progress Toward GED Certificate Among Adults Without High School Diploma or GED (Universe Study and Sample Study, 1994-95 and 1995-96) 141

Exhibit 7.21: Employment Status at Beginning and End of 1994-95 and 1995-96 Even Start Years (Universe Study and Sample Study) 142

Exhibit 7.22: Other Progress Indicators for Even Start Adults (Universe Study and Sample Study, 1995-96) 143

Exhibit 7.23: PSI Growth for Different Even Start Evaluation Samples, Compared With Developmental Growth 144

Exhibit 7.24: PPVT Growth for Different Even Start Evaluation Samples 145

Exhibit 7.25: PLS-3 Growth for the ESIS Evaluation Sample 146

Exhibit 7.26: CASAS Reading Growth for Different Even Start Samples 147

Exhibit 7.27: CASAS Math Growth for the ESIS Evaluation Sample 148

Exhibit 7.28: TABE Reading and Math Growth for the ESIS Evaluation Samples 149

Exhibit 7.29: Rate of GED Attainment for Different Even Start Evaluation Samples 150

Chapter 8: Do Program Outcomes Vary Depending on Participant and Project Characteristics?

Exhibit 8.1: Amount of Core Services Received, All Families in the Sample Study (1994-95 and 1995-96) 152

Exhibit 8.2: Amount of Core Services Received, Families Tested at Pretest But Not at Posttest (Sample Study) (1994-95 and 1995-96) 154

Exhibit 8.3: Amount of Core Services Received, Families Tested at Pretest and at Posttest (Sample Study) (1994-95 and 1995-96) 154

Exhibit 8.4: Hours of Participation Between Pretest and Posttest for Early Childhood Education (Sample Study, 1995-96) 156

Exhibit 8.5: Hours of Participation Between Pretest and Posttest for Adult Education (Sample Study, 1995-96) 156

Exhibit 8.6: Hours of Participation Between Pretest and Posttest for Parenting Education (Sample Study, 1995-96) 157

Exhibit 8.7: Standardized Gains on All Outcome Measures (Sample Study, 1995-96) 158

Exhibit 8.8: TABE Math: Pretest-to-Posttest Gains, by Hours of Services and Pretest Level (Sample Study, 1995-96) 159

Chapter 9: What Resources Support the Even Start Services?

Exhibit 9.1: Type of Local Education Agency (LEA) Partners for Even Start Projects (1995-96) 166

Exhibit 9.2: Community-Based Organization Partners in Even Start Projects (1995-96) 166

Exhibit 9.3: Length of Even Start Grants (1995-96) 167

Exhibit 9.4: Levels of Funding for Even Start Projects (1995-96) 168

Exhibit 9.5: Even Start Program Funds per Family per Year (1993-94, 1994-95, and 1995-96) 169

Exhibit 9.6: Number of Even Start Paid Staff and Their Assignments (1995-96) 170

Exhibit 9.7: Number of Even Start Paid Instructors and Volunteers, by Instructional Area (1995-96) 171

Exhibit 9.8: Academic Degrees and Years of Experience of Even Start Instructors and Aides (1995-96) 171

Exhibit 9.9: Average Days of Inservice Training During Program Year per Staff, by Staff Category (1995-96) 172

Exhibit 9.10: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Program Coordination (1995-96) 173

Exhibit 9.11: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Adult Education (1995-96) 174

Exhibit 9.12: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Parenting Education (1995-96) 174

Exhibit 9.13: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Early Childhood Education (1995-96) 175

Exhibit 9.14: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Adapting Services (1995-96) 176

Exhibit 9.15: Percent of Project Sites Coordinating Services With Collaborating Agencies: Adult and Parenting Education (1995-96) 177

Exhibit 9.16: Percent of Project Sites Coordinating Services With Collaborating Agencies: Early Childhood Education (ECE) (1995-96) 178

Exhibit 9.17: Percent of Project Sites Where Collaborating Agencies Were the Primary or Secondary Providers of Adult Education Services (1995-96) 179

Exhibit 9.18: Percent of Project Sites Where Collaborating Agencies Were the Primary or Secondary Providers of Parenting Education Services (1995-96) 180

Exhibit 9.19: Percent of Project Sites Where Collaborating Agencies Were the Primary or Secondary Providers of Early Childhood Education Services (1995-96) 181

Exhibit 9.20: Number of Instructors, by Salary Source and Student Contact (1995-96) 182

Exhibit 9.21: Degree of Satisfaction with Collaborative Arrangements (1995-96) 182

Exhibit 9.22: Percent of Projects Reporting Barriers to Program Implementation (1995-96) 183

Exhibit 9.23: Projects' Need for Technical Assistance: Program Operation Issues (1995-96) 185

Exhibit 9.24: Projects' Need for Technical Assistance: Support Services (1995-96) 186

Exhibit 9.25: Projects' Need for Technical Assistance: Educational Services (1995-96) 187

Exhibit 9.26: Projects Conducting a Local Evaluation (1995-96) 188

Exhibit 9.27: Plans for Continuation After Current Multi-Year Grant Expires (1995-96) 188

Appendix B: Additional Data Tables

Exhibit B.1: Number of Projects That Submitted 1995-96 Even Start National Evaluation Data, by State and Type of Project (Referenced in Chapter 2) B-1

Exhibit B.2: Number and Percent of Even Start Parents by Region, State, and Race/Ethnicity (1995-96, Referenced in Chapter 3) B-2

Exhibit B.3: Number of Even Start Projects by Region, State, and Type of Community (1995-96, Referenced in Chapter 4) B-4

Exhibit B.4: Additional Criteria Used to Select Families Most in Need (1995-96, Referenced in Chapter 4) B-7

Exhibit B.5: Instructional Services Offered in Three Core Components (Average Across Reporting Project Sites, 1995-96, Referenced in Chapter 4) B-8

Exhibit B.6: "Other" Reasons for Families Discontinuing Participation in Even Start (1995-96, Referenced in Chapter 5) B-9

Exhibit B.7: Correlations Among Family Need Indicators (1995-96, Referenced in Chapter 6) B-10

Exhibit B.8: Solutions to Implementation Barriers (1995-96, Referenced in Chapter 9) B-10

CHAPTER 1: INTRODUCTION

The Even Start Family Literacy Program addresses the basic educational needs of parents and children of low-income families. This national program was designed to provide adult, parenting, and early childhood education as integrated services to families. Even Start offers (1) adult education and literacy programs for parents; (2) early childhood education for the children of these parents; and (3) parenting education to assist parents in actively and effectively promoting their children's development.

Since its inception in 1989, the program has undergone significant changes. The number of projects has grown from seventy-six projects in 1989 to more than 570 in 1996. In 1992 the primary responsibility for program administration was transferred from the U.S. Department of Education to the individual states. While a steady stream of new Even Start projects has joined the program each year, some mature projects reached their seventh year of operation in 1996.

To monitor development of this program, the law that authorizes Even Start mandates an evaluation of all Even Start projects. Information collected annually provides performance feedback that is useful to local projects, state and federal administrators, legislators, and policymakers for program improvement and policy development. This information also contributes to the knowledge base on the effects of family literacy programs by investigating the relationships between program processes and outcomes.

The first national evaluation documented the program's development during 1989 to 1993 and provided the early, short-term assessment of its effectiveness (St.Pierre et al., 1995). The current national evaluation covers the four subsequent program years, 1993 to 1997.

THE EVEN START PROGRAM: LEGISLATION AND ADMINISTRATION

The Even Start Program was authorized by the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988, Part B of Chapter 1 of Title I (P.L. 100-297). The Even Start legislation was amended in July 1991, when Congress passed the National Literacy Act (P.L. 102-73). In 1994, the Even Start program was reauthorized by the Improving America's Schools Act as Part B of Title I of the ESEA.[1] According to the 1994 legislation, the Even Start program is intended to:

[1] Even Start projects were required to implement in program year 1995-96 the changes made by the 1994 reauthorization law.

> "...help break the cycle of poverty and illiteracy by improving the educational opportunities of the Nation's low-income families by integrating early childhood education, adult literacy or adult basic education, and parenting education into a unified family literacy program ....The program shall (1) be implemented through cooperative projects that build on existing community resources to create a new range of services, (2) promote achievement of the National Education Goals, and (3) assist children and adults from low-income families to achieve to challenging State content standards and challenging State student performance standards." (P.L. 103-382, Sec. 1201)[2]

To be eligible for Even Start in 1995-96, a family needed (a) a parent who was eligible for adult education services under the Adult Education Act or who was within the state's compulsory school attendance age range and (b) a child under 8 years of age. Beginning in 1995-96, more teen parents became eligible for Even Start. This new participant group included teen parents—either under or over age 16—within a state's compulsory school attendance age range, as long as a local educational agency provides for the basic educational services for these parents.[3]

Even Start began as a federally administered program in fiscal 1989, with grants totaling $14.5 million awarded to seventy-six projects. The fiscal 1991 funding rose to $49.7 million. According to the Even Start statute, when program funding reached $50 million, the program was to be administered primarily at the state level. In 1992, with the federal appropriation for 340 projects exceeding $70 million, the program administration was assumed for the most part by the states.

Most Even Start projects now are state administered. Each state receives funding based on the relative proportion of funds it receives under the Title I allocation formula. States hold grant competitions and make subgrant awards. The statute specifies that each Even Start subgrantee receive a minimum of $75,000 per year, except for one subgrantee per state that may receive less.

Family literacy programs specifically for migrant families, Indian tribes and tribal organizations, and insular areas are supported through special set-aside funds (5 percent of the total Even Start allocation) and remain under federal administration. These funds support the implementation of the Even Start family literacy approach tailored for groups of participants with special circumstances. Since 1993-94, approximately ten to twenty each of Migrant Education Even Start (MEES) and tribal Even Start projects have been funded each year.

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[2] A full text of the Even Start legislation appears in Appendix A.

[3] Prior to this change regarding eligibility of teen parents, Even Start could only serve families headed by teen parents at least 16 years old or beyond the age of compulsory school attendance *who were not attending school.*

MEES projects serve a highly mobile population—families moving across several states each year. In addition to economic and educational limitations common to all Even Start families, many migratory parents and children are recent immigrants and are limited in English language proficiency. The MEES educational services need to account for a great diversity in language and cultural backgrounds of participants. One of the major challenges for MEES projects is to design and deliver meaningful educational services to families who may be in their programs for only a few months before moving. Some MEES projects are designed to follow the same families across states over time; others focus their efforts on families only while they are in their communities.

Tribal Even Start projects experience a different set of special challenges. Families tend to be stable geographically but may be widely scattered in remote, rural areas. In these areas, families' access to educational and support services provided by other community organizations may be limited. For these reasons, some tribal projects rely mainly on home-based educational services. While these circumstances may be common to many rural projects, incorporating materials and activities that are consistent with and promote the Native American heritage is an important objective of many tribal Even Start projects.

In addition to the MEES and tribal projects, discretionary grants for statewide family literacy initiatives and a family literacy project in a prison that houses women and their preschool-aged children are authorized. These projects also are funded and administered directly by the U.S. Department of Education.

PRINCIPAL COMPONENTS OF THE EVEN START APPROACH

The underlying premise of Even Start is that combining adult literacy or adult basic education, parenting education, and early childhood education into a unified family literacy program offers promise for helping to break the intergenerational cycle of poverty and low literacy in the nation. The Even Start program has three interrelated goals:

- To help parents improve their literacy or basic educational skills;
- To help parents become full partners in the education of their children; and
- To assist children in reaching their full potential as learners.

Exhibit 1.1 presents a conceptual model that describes the types of activities conducted by Even Start projects; input factors that are believed to influence the design and delivery of services; and the intended outcomes for participating parents and children. Even Start services provided to children and their parents can be grouped into two areas: (1) core educational services and (2) support services. The core services have three components, as specified in the reauthorization legislation:

- **Adult education and adult literacy:** high-quality instructional programs[4] for adults to promote adult literacy [including adult basic education (ABE), adult secondary education (ASE), English as a second language (ESL), and preparation for the General Education Development (GED) certificate];
- **Parenting education:** high-quality instructional programs to empower parents to support the educational growth of their children; and
- **Early childhood education:** developmentally appropriate educational services for children designed to prepare them for success in regular school programs.

In addition to core services, Even Start projects typically provide a range of support services, some of which are designed to facilitate provision of core services. Examples of support services are transportation, child care, health care, meals, nutrition assistance, mental health referrals, referrals for employment, advocacy assistance with governmental agencies, counseling, child protective services, referrals for screening or treatment for chemical dependency, referrals for services to battered women, special care for a disabled family member, and translators. The Even Start legislation requires that support services be obtained from existing providers whenever possible to ensure that Even Start projects avoid duplication of services.

Even Start is intended to benefit families in several domains. While not every Even Start project will try to affect all of the outcomes listed in Exhibit 1.1, potential program outcomes for parents include positive changes in literacy behaviors (e.g., shared literacy events with children and increased reading and writing activities in the home); parenting behavior and skills (e.g., positive parent-child relationships and positive expectations for child); and educational and employment skills (e.g., improved reading and English language ability and higher educational attainment). Goals for Even Start parents also may include growth in personal skills and community involvement. The potential positive impact of Even Start on children includes improved school readiness and achievement. Once children enter school, outcomes might include satisfactory school performance, improved school attendance, and a lower incidence of special education, and retention in grade.

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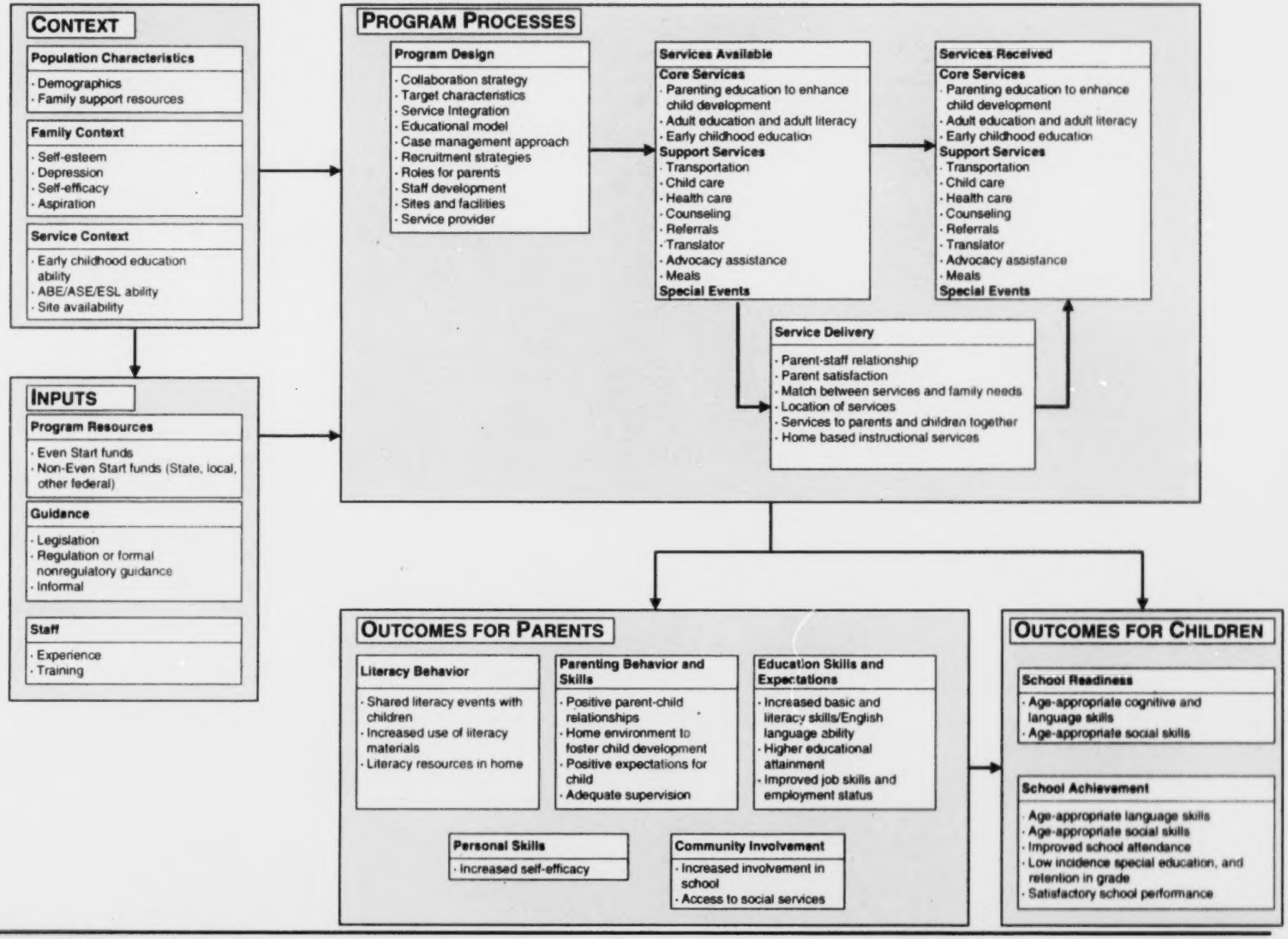
[4] In April 1996, the Even Start statute was amended to require high-quality, *intensive* instructional programs. This requirement became effective for projects in program year 1996-97.

Exhibit 1.1: Even Start Conceptual Model



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While setting forth major elements required for all Even Start projects, the Even Start legislation allows grantees great flexibility in designing services to meet local needs. The model reflects the differentiation among local projects across many dimensions. These include:

- The characteristics of target children and adults;
- The collaboration strategy to coordinate service delivery with other agencies;
- The extent to which services for families are integrated (e.g., activities in parenting education reinforcing learning in adult education);
- The use of an existing educational model and materials for delivering early childhood and adult basic education services;
- Strategies for recruiting and retaining program participants;
- The role that parents play in the project; and
- Staff development activities.

VARIATIONS UPON THE BASIC MODEL

The Even Start legislation requires a number of key elements and features to be implemented in all local projects. They include serving families most in need of Even Start services; providing three core services (adult, parenting, and early childhood education), support services, and home-based services to participants; integrating educational activities across the three core areas; coordinating service delivery with other existing programs; and conducting local evaluations.

While the legislation tells projects *what* to do, decisions regarding *how* to implement each requirement are left up to the projects. While the legislation requires high-quality, intensive instructional programs, projects decide on the frequency and duration of program activities, whether the activities are primarily center based or home based, and whether to invent educational curricula *from scratch* or use a hybrid of existing approaches. Projects decide which program components will be paid by Even Start funds and which components will be supported by collaborating agencies.

The number and characteristics of program participants vary greatly across projects, depending on such factors as geographic location, economic and social characteristics of local population, and the specific design of the project. On average, each Even Start project serves approximately sixty families each year. However, some large projects in highly populated urban areas enroll several hundred families, while small rural projects may serve twenty to thirty families per year.

Overall, Even Start families are very poor; 70 percent have annual incomes below $12,000 (with an average household size of five or six persons). In terms

of parents' educational backgrounds, a majority of parents enter Even Start lacking a few years of high school education. However, about 40 percent have only primary school education. Many parents are not native English speakers and have very limited English language abilities.

Projects can decide to focus educational activities for children on a narrower age span than the birth-to-eight year range allowed by the legislation as long as each project, at a minimum, targets children of a three-year age range. Since the Even Start program began, local projects have consistently offered services for preschool-aged children. Services for infants and toddlers, initially offered less frequently, are now available in many more projects.

Most Even Start projects provide, either directly or through collaboration with existing early childhood programs such as Head Start, a center-based early childhood program. These center-based programs usually incorporate elements of pre-existing curricula designed for young children. School-age children through age 7 Even Start services that often are provided in conjunction with their compulsory education activities. Such services may take the form of homework assistance given in before- and after-school child care programs and summer school activities.

Adult education services are provided in a variety of formats by different levels of trained personnel, ranging from volunteers to certified adult education teachers. Some projects offer adult education classes geared toward completing a GED, while others provide general instruction in basic skills such as reading, writing, and math. In some projects, adult education services are focused chiefly on English as a second language curriculum. Projects working with adults who have very low-level basic skills may arrange individual tutoring through Literacy Volunteers of America (LVA) or provide other types of one-on-one instruction during home visits.

Parenting education is less frequently available through other sources than are adult and early childhood education programs. Thus, many projects rely mostly on Even Start resources to deliver parenting education services. These services may take the form of group discussions, hands-on activities, home visits, and presentations by invited speakers. Topics addressed in these activities include helping families make use of available community services, increasing parents' understanding of their role in their children's education, and training parents in child-behavior management.

Educational activities are often offered in institutional settings (e.g., adult education classes in high schools and community colleges and preschool programs associated with community-based organizations or local education agencies). In some projects, however, particularly those in sparsely populated rural areas, Even Start services may be home based, involving highly individualized instruction tailored to each family's needs.

Projects vary greatly in the amount of experience in operating the Even Start program. Some projects began with relevant prior experience in providing family educational services and have further refined and enhanced their services

over four or more years of Even Start grants. In 1995-96, nearly 40 percent of projects had more than three years of Even Start experience. On the other hand, every year about 15 percent of projects are new Even Start grantees. Commonly, new grantees spend six months or more in program development before they begin enrolling families and even more time before all key program elements are in place.

ORGANIZATION OF THE REPORT

This is the third Interim Report under the current Even Start national evaluation. *Chapter 2: Even Start National Evaluation* describes the components of the previous and current national evaluations, followed by more detailed information on the research questions being addressed in the current evaluation.

Program year 1995-96 was the second year under this evaluation in which information on participating families was collected. *Chapter 3: Who Are the Even Start Families?* presents detailed descriptions of the families, parents, and children who participated in Even Start during 1995-96. Following this introduction to the participating families, *Chapter 4: What Services Do Even Start Projects Provide to Participants?* extensively describes educational and support services Even Start projects offered to the families.

To distinguish between the services projects offer and the services in which families participate, *Chapter 5: To What Extent Did Even Start Families Participate in the Services Offered?* reports participation rates for parents and children in all components of the educational services. We also examine more closely the neediest of Even Start families in *Chapter 6: What Services Are Provided to the Neediest of Even Start Families?* It presents focused analyses of very needy families and the extent of their participation in Even Start.

Program year 1995-96 also was the second under this evaluation in which data to assess the effectiveness of the Even Start program were collected. Findings on participant progress over two years are presented in *Chapter 7: What Are the Educational and Developmental Outcomes of Even Start Participants? Chapter 8: Do Program Outcomes Vary Depending on Project and Participant Characteristics?* expands on the preliminary findings reported in the 1994-95 report concerning the potential influence of various project characteristics and service delivery practices on participants' educational progress.

Finally, in *Chapter 9: What Resources Support the Even Start Services?* we return to project-level information. While Chapter 4 describes the nature and intensity of services offered to participants, Chapter 9 documents the administrative context of Even Start projects, levels of funding, staffing patterns, problems or challenges to implementing Even Start services, and issues for which projects need technical assistance.

CHAPTER 2: EVEN START NATIONAL EVALUATION

Section 1209 of the reauthorized Even Start legislation requires an independent evaluation of the projects funded under Even Start to:

1) determine the performance and effectiveness of programs ... and

2) identify effective Even Start programs ... that can be duplicated and used in providing technical assistance to Federal, State, and local programs.

In addition, each Even Start project is required to conduct an independent local evaluation.

THE FIRST EVEN START NATIONAL EVALUATION

In January 1990, the U.S. Department of Education awarded the first contract for a national evaluation of Even Start. The evaluation, completed in April 1994, was based on the National Evaluation Information System (NEIS), which compiled data from all Even Start projects and an In-Depth Study (IDS) of ten projects.

The NEIS was designed to collect a common set of data from each Even Start project and Even Start participants. The NEIS provided annual descriptive information about Even Start, including types of projects funded, services offered, collaborative efforts undertaken, and obstacles to program implementation. It also provided detailed information describing the families participating in Even Start, the services they received, and the progress they made in areas such as adult basic skills, children's school readiness, and parent-child interactions.

The second component of the first evaluation, the In-Depth Study, was designed to complement the broad-based NEIS data collected from all Even Start projects with detailed information from a subset of ten purposively selected grantees. The IDS focused on the short-term outcomes of Even Start on adults and children. Five of the ten projects implemented a design where families were randomly assigned to Even Start or a control group. Major findings from the first evaluation were summarized in the final report published in 1995 (St.Pierre et al., 1995).

The first national Even Start evaluation documented the nature of program services and the types of families served by the program. From 1989-90 to 1992-93, federal funding for Even Start increased from $14.5 million to $70 million, and the program grew from seventy-six projects serving 2,500 families to 340 projects serving 16,518 families. Data showed that the program achieved its

goal of working with families "most in need" of Even Start services—79 percent of adults had not completed high school when they entered the program, and 66 percent of families had annual incomes under $10,000. Though there was great project-to-project variation in most aspects of Even Start, virtually all Even Start projects were able to design and offer the three required core instructional services of adult education, parenting education, and early childhood education. They also offered instructional services in a home-based setting, services to parents and children together, and appropriate support services that enabled families to participate fully in Even Start's core services.

Outcomes for children followed a pattern seen in other studies of preschool programs: early positive effects on cognitive development that diminish over time once control group children start to receive school-based services. Similarly, the pattern of outcomes for adults was consistent with what has been learned from other studies of welfare-to-work programs: Even Start projects were able to increase rates of GED attainment but with no commensurate increase in functional literacy. While acquiring a GED may be an important stepping-stone to future education or employment, it is discouraging that literacy skills did not appear to improve at the same time. Finally, Even Start families that were intensively engaged in core services did better than families with lower levels of participation.

CURRENT NATIONAL EVALUATION

In March 1994, the U.S. Department of Education awarded the second national evaluation contract. This evaluation consists of four related but distinct components:

- The Even Start Information System (ESIS) to collect data from all projects;
- The Sample Study to collect outcome data from approximately fifty-seven selected projects;
- Site visits to Migrant Education Even Start projects; and
- Site visits to Even Start projects for Indian tribes and tribal organizations.

This four-year study continues to monitor the implementation and effectiveness of the Even Start program through analyses of the same critical issues examined in the first evaluation. In addition to the national Even Start evaluation, other studies of Even Start funded both by the U.S. Department of Education and other organizations are examining various specific issues affecting the Even Start program. In addition, all local Even Start projects arrange for evaluations of their projects by independent evaluators.

RESEARCH QUESTIONS

The current national evaluation addresses four major questions listed below, each associated with a set of more specific sub-questions.

1. *Who is served by the program? What services do they receive? Is the program reaching the appropriate target population?*

- What are the characteristics of family units participating in Even Start?
- What are the background characteristics of adults who participate in Even Start (e.g., gender, age, race/ethnicity, employment status, annual income, primary language)?
- What is the educational history of adults who participate in Even Start? What percentage of adults enter with a high school diploma or a GED and what are their characteristics?
- What are the background characteristics of children who participate in Even Start (e.g., gender, age, race/ethnicity, special needs)?
- What are the program participation histories of children who participate in Even Start?
- How do the characteristics of Even Start adults compare with the characteristics of participants in adult education programs nationally?
- How do the characteristics of Even Start children compare with the characteristics of participants in Title I and Head Start programs?
- How do background and literacy characteristics of adults and children vary across projects? Is it possible to identify sets of projects that appear to be using different targeting criteria? Do some projects appear to target "high need" populations while others target "low need" populations?
- How many families participate in Even Start? In each of Even Start's three core services? In all core services?
- How long do families participate in Even Start on a program-year basis (how many months are services received)?

2. *How is the federal funding spent on the program? How many of the projects are well implemented?*

- What is the geographic and urban/rural distribution of Even Start projects?
- What is the federal cost for Even Start projects? What services are purchased with Even Start funds?
- How are families recruited into Even Start? How do projects target recruitment efforts?
- What local evaluation activities are being undertaken by Even Start projects?

- What is the nature of services in early childhood education, adult education, and parenting education offered by the project? What activities does the project offer for parents and children together? What is the nature of home visits offered by the project? What types of support services are provided to participants?
- What types of collaborations exist between Even Start and other agencies? What types of agencies are collaborators?
- What is the training and experience of staff who provide Even Start services?
- How long do Even Start families stay in the program?
- What barriers exist to successful program implementation?
- Are the differences in program implementation associated with such factors as project cohort, length of time the project has had a grant, and area of the country?

3. *How well does the Even Start basic model work? Do participants perform better on key measures than similar persons who do not participate?*

- What gains are observed for Even Start children on measures of school readiness and vocabulary?
- What gains are observed for Even Start adults on measures of functional literacy, GED attainment, employment status, annual income, parent expectations, and parenting skills?
- With what degree of confidence can observed gains be attributed to participation in Even Start?

4. *What are effective practices and programs?*

- What participant characteristics (e.g., educational level of adults at entry, age of parent, size of family) are associated with program outcomes?
- What project characteristics (e.g., urban/rural location, degree of implementation, year-round versus school-year operation schedule, high federal cost per family versus low federal cost per family) are associated with program outcomes?
- What staff characteristics are associated with program outcomes?
- What service characteristics (e.g., amount of core service received, percentage of core services delivered at home versus in a center, percentage of core services delivered to parents and children together) are associated with program outcomes?

- Is it possible to define subgroups of families based on need criteria (e.g., income, entry education level), and determine whether outcomes vary across the subgroups?

While the above list includes all research questions articulated at the initiation of the current evaluation, some questions necessitated accumulating data over time. Thus, the 1993-94 Interim Report largely was restricted to descriptions of the projects and how they implemented the Even Start model. The 1994-95 report updated the descriptions of Even Start participants and their participation outcomes for the first time since program year 1992-93. This report on the 1995-96 evaluation will add an examination of project characteristics with reference to the number of years the projects have operated Even Start.

THE EVEN START INFORMATION SYSTEM (ESIS)

The ESIS represents a modification of the NEIS used in the first evaluation. Like the NEIS, the ESIS is used to collect a common set of data from all Even Start projects to generate ongoing information about such issues as types of projects being funded; nature and intensity of services offered; interagency collaboration; major difficulties in program implementation; participating families; and families' participation outcomes.

Each Even Start grantee is responsible for completing four ESIS forms:[5]

Form A: Preliminary Project Information collects information on the community context for the project.

Form B: Project Description collects data on the project budget, program design, recruitment strategies, family education services, family support services, staffing, implementation barriers, technical assistance needs, and local evaluation.

Form C: Participant Characteristics at Intake collects information on the socioeconomic status of the participating families and the demographic characteristics and educational background of each participating parent and child.

Form D: Participation in Services identifies the educational and non-educational services in which each adult and child participated during the program year and the extent of their participation.

Combined across all projects, the ESIS data are used to describe the Even Start program as a whole. The data also are used to categorize projects into different

[5] Copies of the ESIS data collection forms are available from the U.S. Department of Education. Planning and Evaluation Service, 600 Independence Avenue, S.W., Room 4168, Washington, D.C. 20202.

subgroups for further analysis. For instance, this report includes descriptions of service delivery and participation outcomes for projects grouped by their years of experience in operating Even Start and percentages of teen parents they serve.

SAMPLE STUDY

Information about program outcomes for children and parents, as well as detailed participation data, are submitted to the evaluation contractor by a sample of fifty-seven projects. Sample projects collect and submit these data in addition to the same project-level and participant-level data that all the Even Start projects submit each program year. The Sample Study projects agreed to collect more comprehensive data on participants for up to three years. This approach of collecting broad-based data from all of the local projects and more comprehensive information on educational and performance outcomes from a much smaller number of projects minimizes the burden of data collection for this evaluation and allows for data collection over a time period that easily encompasses the tenure of most families' participation in the Even Start program.

The Sample Study projects were selected randomly to represent urban and rural areas in all regions of the country. These projects were initially funded in 1992 or 1993. By the 1995-96 program year, they were in their third or fourth year of operation.

Projects participating in the Sample Study were asked to administer assessment measures to monitor the impacts of the Even Start educational services on participating parents and children. During the instrument selection process, instruments were chosen that addressed the following criteria: ease of administration for project staff; minimal burden for project participants; and appropriateness of the measure for assessing the three core areas of Even Start services (e.g., English language literacy skills of adults, the quality of the home environment provided by parents for their children; and the effect of early childhood education on school readiness and language development for children).

The outcome measures for each of these areas are discussed further below. The specific outcomes for children participating in Even Start are measured by the following assessments:

- The Preschool Inventory (PSI) for school readiness skills; and
- The Preschool Language Scale-3 (PLS-3) to measure language development.

To examine the outcomes of adult education, projects in the Sample Study have the choice of administering one of two tests to each participating adult:

- The Comprehensive Adult Student Assessment System (CASAS), an adult-oriented functional assessment system that measures a broad range of adult literacy skills and their application in real life domains; or

- The Tests of Adult Basic Education (TABE) Reading and Mathematics subtests for participants in GED preparation programs and some adult secondary education programs.

To assess the outcomes of parenting education, the Sample Study projects use:

- The Home Observation for Measurement of the Environment (HOME) Screening Questionnaire.

To obtain a true baseline measure of adult and child skills prior to participation in the program, only families new to Even Start were included in the Sample Study. In addition, only families in which at least one adult and one child spoke either Spanish or English were to be tested, because the measures are available in only these two languages.[6]

Multiple parents and children from the same family could be included in the Sample Study. Unlike the first evaluation, where projects were instructed to select a target adult and child for testing, projects in the Sample Study were told to include parents who were eligible for and expected to participate in Even Start core services. Also to be tested were all children in a family who were between 2 and 5 years of age at program entry and who would be participating in early childhood education provided by Even Start or a collaborating agency.

The Sample Study projects were selected in the spring-summer of 1994 and received training on the Sample Study measures and procedures in August and September 1994. Pretest measures were to be administered to parents and children within thirty days of the start of program services. The posttest occurred at the end of the 1994-95 program year or when the family was planning to exit the program (whichever came first, as long as it was at least three months after the pretest). Families still enrolled in Even Start in the spring of 1996 were to be tested again as a one-year follow-up. Families that enrolled in these fifty-seven projects in the fall of 1995 also were to be included in the Sample Study, with the pretest and posttest in 1995-96 and the follow-up test in 1997.

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[6] Although the child outcome measures, the Preschool Inventory and the Preschool Language Scale, are available in English and Spanish, none of the outcome measures for adults are administered in any language other than English. The decision to use assessment instruments that measure adults' progress in English language skills reflects the programmatic goals of developing English language proficiency. Over the past several years, however, the proportion of the limited English proficient (LEP) participant population has increased, which means that the outcome measures are not equally available for all Sample Study participants, and further, that inferences about the program are applicable only to those participants for whom we have outcome data.

Site Visits to Migrant Education Even Start Projects and Tribal Even Start Projects

The current evaluation included site visits to three of the fourteen Migrant Education projects and three of the nine tribal Even Start projects operating in 1994-95. The visits focused on the special features of these Even Start projects and on the appropriateness of the ESIS for collecting data from these sites. Information gathered from the two sets of site visits has been summarized in two reports.

The components of the current evaluation are summarized in Exhibit 2.1.

Scope of the 1995-96 Evaluation

Universe Study

The scope of the current evaluation has expanded considerably since 1993-94 due to the growth in the number of projects (Exhibit 2.2). In 1995-96, there were 576 Even Start projects nationwide. Of these, 98 percent (563 projects) returned at least some evaluation data by the final due date. The thirteen projects not included in the evaluation analyses were distributed across eight states in all regions. Thus, the exclusion of these projects from analyses should not bias the national program description. The evaluation results presented in this report essentially represent the entire Even Start program.

The 563 projects that submitted evaluation data represent all three types of grantees as shown in Exhibit 2.2. The distribution of reporting projects by state is presented in Exhibit B.1 in Appendix B.

For the 1995-96 evaluation, the 563 reporting projects submitted at least some participation data on 30,000 families, 34,400 parents, and 45,100 children. Chapters 3 through 6 and Chapter 9 of this report present the findings based on analyses of data from these projects, families, and individual participants.

Exhibit 2.1: Components of the Even Start Evaluation

Evaluation Components	Target Population	Types of Data Collected	Data Collection Procedures and Years	Basic Research Questions
National Evaluation Activities				
Universe Study	All Even Start projects and participants	Participant characteristics, services, implementation, costs, participation outcomes	Parent interview, project questionnaire 1994-1997	Who is served by the program and what services do they receive? Is the program reaching the appropriate target population? How well was the federal funding on the program spent? How many of the programs were well implemented?
Sample Study	Even Start participants in 57 selected Even Start projects	Outcomes: school readiness, adult literacy skills, home environment, program participation	Child and adult tests (PSI, PLS-3, TABE, CASAS), HOME Screening Questionnaire, family contact logs 1995-1997	How well does the basic Even Start model work? Do participants perform better on key measures than similar persons who do not participate? What are effective practices and programs?
Study of Migrant Education Even Start Projects	Three Migrant Education Even Start projects	Special issues regarding program implementation, effective practices, applicability of the ESIS	Staff interview, observations of educational activities 1994	What issues are special to implementing Even Start programs for migrant families? What are promising practices? How well does the ESIS capture the unique features of these projects?
Study of Tribal Even Start Projects	Three tribal Even Start projects	Special issues regarding program implementation, effective practices, applicability of the ESIS	Staff interview, observations of educational activities 1995	What issues are special to implementing tribal Even Start programs? What are promising practices? How well does the ESIS capture the unique features of these projects?
Additional Evaluation Activities				
Focused studies sponsored by the federal government and other organizations	Projects selected using various criteria depending on the focus of the study	Focused assessment of specific program implementation and effectiveness issues	Many different evaluation approaches used	Different, specific research questions are addressed in each project.
Local evaluation	Conducted at local level	Additional information desired by local administrators	Proposed in project application All years of grant	How does the project meet specified local needs?

Exhibit 2.2: Number of Projects Participating in the Even Start National Evaluation: Program Years 1993-96

Type of Project	Number and Percent of Projects Reporting	Total Number of Projects Operating
1993-94 Total	**439 (90%)**	**490**
State-administered Even Start Projects	420 (92%)	450
Migrant Education Even Start Projects	10 (45%)	22
Tribal Even Start Projects	9 (100%)	9
1994-95 Total	**476 (93%)**	**513**
State-administered Even Start Projects	458 (93%)	490
Migrant Education Even Start Projects	11 (79%)	14
Tribal Even Start Projects	7 (78%)	9
1995-96 Total	**563 (98%)**	**576**
State-administered Even Start Projects	546 (98%)	558
Migrant Education Even Start Projects	9 (100%)	9
Tribal Even Start Projects	8 (89%)	9

Note: The numbers of state-administered, Migrant Education, and tribal projects reported for 1993-94 may be somewhat inflated since there was some confusion regarding the definition of an "Even Start project" in the first year of the second evaluation. For example, programs located across several states but supported by a single Migrant Education Even Start grant may have been reported as separate projects. Since the 1994-95 evaluation year, the definitional problem was clarified by strictly equating each federally-administered grant and state-administered subgrant as a project, regardless of the number of program sites.

Exhibit reads: For the 1995-96 national evaluation, 546 state-administered Even Start projects submitted data, representing 98 percent of the total of 558 state-administered projects operating in 1995-96.

SAMPLE STUDY

Of the fifty-seven projects in the Sample Study, we received assessment test data from fifty-four projects (95 percent).[7] Exhibit 2.3 shows the number of parents and children with valid test data from the Sample Study. Individuals with out-of-range scores or missing data were excluded from these counts. In addition, posttests that were administered less than three months after pretests were not included in the analyses.

Approximately 1,100 children were tested at pretest on the PSI and PLS-3. There are fewer parents than children in the study (approximately 260 with CASAS and 725 with TABE) for two reasons: (1) the TABE and CASAS are administered in English only; and (2) there are more likely to be multiple children but only one parent tested per family. These parents and children

[7] This figure includes all projects that submitted any data as part of the Sample Study. Only fifty-three projects submitted valid outcome data. As a result, the analyses described in Chapters 7 and 8 are based upon data from fifty-three Sample Study projects.

represent 327 families with at least one test score at pretest and posttest for both adults and children.

The number of parents and children in the Sample Study continues to be lower than we expected. This is due to the following factors: Many of these programs that were in their second or third year of operation did not enroll many new families in the fall of 1994 but continued to serve families who had joined in previous years. Therefore, to augment the number of families with test data, we asked projects in the Sample Study to include those new families who enrolled in Even Start for the first time during the fall of 1995. It also is clear that larger numbers of families enroll in Even Start than the number of pretest and posttest scores would indicate. In other words, far fewer families have scores for the pretest and one or two posttests than have scores for the pretest alone.

Exhibit 2.3: Number of Parents and Children in the Sample Study at Pretest and Posttest (1994-95 and 1995-96)

Measure	Number with Pretest	Number with Pretest & Posttest 1	Number with Pretest, Posttest 1, and Posttest 2
CASAS reading	290	177	17
CASAS math	257	152	19
TABE reading	748	328	26
TABE math	725	304	22
PSI	956	603	42
PLS-3 Auditory	1126	785	108
PLS-3 Expressive	1070	784	87
PLS-3 Total	1118	781	87
HOME Screening Questionnaire	1031	438	18

Exhibit reads: 290 parents were tested at pretest on the CASAS reading test; 177 parents were tested at both pretest and posttest on the CASAS reading test, and 17 were tested at the second posttest as well.

The number of adults with data from both the pretest and posttest (who can be part of an analysis of change or gain over the program year) drops by nearly half of the original number at pretest; for children, the reduction in sample size is less dramatic. The families with only pretest data differ marginally from those with pretest and posttest data on demographic variables such as family income, employment status, and language spoken in the home; families with both pretest and posttest data are more likely to be employed, have higher incomes, and speak languages other than English at home. However, significantly fewer families with pretest and posttest data are headed by a single parent (39 percent) than families with only pretest data (50 percent). In addition, mothers' education among the group with pretest and posttest data is almost a grade-level higher than among the pretest only group (11.2 years versus 10.5 years).

The group with both pretest and posttest data may have more family support because there is a spouse or partner to share responsibilities. This hypothesis gains support when we look at the reasons for discontinuing participation in the program among families without posttest data. Among the group of families with exit data (n=721), 28 percent either were dropped from the program for lack of attendance

or left because of a lack of interest; 4 percent left due to a family crisis; and 17 percent moved out of the area. Additionally, 31 percent of the families with pretest and posttest data left the program because they completed their goals, contrasted with only 14 percent of the families with pretest only data. Given these reasons for more than one-half of the original Sample Study participants leaving the program, the group of families with both pretest and posttest data may not be representative of all families in Even Start. This threat to the validity of the Sample Study data should be kept in mind when interpreting the program effects presented in Chapters 7 and 8 of this report.

STATISTICAL ANALYSIS

The evaluation findings reported in Chapters 3-6, and 9 are based on data representing essentially all Even Start projects and participants—the universe of the Even Start program—for program years 1994-95 and 1995-96. Descriptive statistical analyses (including cross tabulations of two or more variables, means, standard deviations, and univariate and multivariate analyses of variance) were used to compute (1) the numbers and percentages of projects and participants who provided specific categories of responses and (2) averages and ranges of information such as the number of instructional hours for either all or various subgroups of respondents.

Since the statistical analyses reported in Chapters 3-6 and 9 were based on "population data" (the universe of the Even Start program), the selection of results described throughout this report is based upon more than statistical significance alone. We discuss differences that are numerically large (e.g., 50 percent versus 80 percent) and results that appear to have practical and/or programmatic implications.

The importance of specific findings depends to a certain degree on the interests of stakeholders rather than any statistical rules. For example, a 5-percentage-point increase in the percentage of families participating in all core services would have accounted for roughly 1,600 more families receiving full Even Start services nationally in 1995-96. While this rate of increase for a typical local project with sixty families would have affected two or three families, such changes begin to have wider meaning in the aggregate. Thus, the practical implication of this finding may be different for federal policymakers, local service providers, and the lives of individual participants who contribute to the increase.

Analyses reported in Chapters 7 and 8 are based on samples of projects and participants selected for the Sample Study. Most of the findings about outcomes described throughout this report are based upon pretest and posttest data collected across program years 1994-95 and 1995-96. While we do have limited posttest #2 data on some measures, there are so few adults or children (generally under 15 percent of those with pretest and posttest #1 scores) that we base the majority of our analyses on simple pretest to posttest #1 differences. We report statistically significant difference scores as appropriate or as indicated.

In addition to the descriptive analyses, exploratory multiple regression analyses were performed to examine relationships among participant characteristics, program services, and outcomes. These analyses have produced inconclusive results. For the final report prepared at the conclusion of program year 1996-97, the descriptive information from all years of the evaluation will be used to pursue hypotheses-testing analyses further using univariate and/or multivariate analyses as appropriate and as indicated by the robustness of the data.

CHAPTER 3: WHO ARE THE EVEN START FAMILIES?

Even Start has grown steadily since it began in 1989-90 with seventy-six projects serving approximately 2,500 families. Seven years later in 1995-96, approximately 31,500 families participated across 576 projects. Despite this steady increase in numbers, many characteristics of Even Start families have remained relatively stable.

There were, however, reasons to expect some changes in participant profiles in 1995-96, especially among new families. One was the 1994 reauthorization of Even Start that extended program eligibility to teen parents who had been ineligible for services under the Adult Education Act because of age or because they were enrolled in school. This change became effective for program year 1995-96. The reauthorized law also strengthened the mandate for the program to serve families most in need of Even Start services.

Another factor that could affect Even Start participant profiles is welfare reform. The new five-year lifetime limitation on receipt of assistance, coupled with the necessity to obtain employment to receive benefits, may increase the need among low-income families for educational and job training services aimed at achieving economic self-sufficiency. Conversely, welfare reform could have the opposite effect on Even Start families; the emphasis on job training and employment may interfere with efforts toward educational and family literacy goals. Overall, these developments are likely to create new challenges for Even Start services.

This chapter begins by presenting the basic demographic characteristics of families participating during 1995-96, including family income and parents' employment status. (Low family income is a statutory requirement for selecting the "most in need" families to participate in Even Start.) The second section of the chapter describes other family characteristics that reflect the extent of families' need for Even Start educational and support services. These characteristics include parents' and children's educational backgrounds, parents' English proficiency, and parents' primary reasons for enrolling in Even Start. The entire discussion of participant characteristics is guided by one underlying question: Is Even Start, which is designed to combat the intergenerational cycle of poverty and low literacy, serving families who are most in need of family educational services?

Before discussing participant characteristics, however, we must note that imprecise wording of some questions in the evaluation instrument introduced some ambiguity into the analysis findings. One of the most serious examples of this problem is a lack of clear distinction between the terms *family*, *household*, and *participating adult*. These terms were used somewhat inconsistently in several related questions (e.g., amount and main source of income for a *family*, number of people who live in a *household*, structure of a *family*, and receipt of welfare for a *participating adult*). These data do not allow us to assess precisely the economic status of a *family unit* participating in Even Start because the economic unit may include more people living in the *household* (e.g., parents of teen parent) and the respondent may have reported only the income of the

participating family. Thus, the *family* income reported may underestimate the *household* income for some Even Start families.

It also must be noted that participant characteristics data were collected only on participating parents and children.[8] Descriptions of Even Start *families'* need for services are based on the characteristics of participating adults and children. Approximately 10 percent of families included in the 1995-96 evaluation had more than one participating parent. To the extent that a participating parent may have greater needs for Even Start services than the non-participating parent in the same family (e.g., the former is a recent immigrant with very limited English ability but the latter is proficient in English), the findings reported in this chapter would overestimate total family need. This caveat applies to the findings involving parents' educational background, English proficiency, and income-earning capabilities.

HOW MANY FAMILIES WERE IN EVEN START IN 1995-96?

In the 1995-96 program year, approximately 31,500 families, 36,400 parents, and 47,800 children participated in Even Start across 576 projects (Exhibit 3.1).[9] More than 60 percent of families, parents, and children were new enrollees in Even Start; 40 percent or fewer were continuing from the previous year.

Exhibit 3.1: 1995-96 Even Start Participants (Estimated for All 576 Projects Operating in 1995-96)

	Continuing from 94-95 (Percent of Total)	New Enrollees (Percent of Total)	Total 95-96 Participants
Families	11,600 (37%)	19,900 (63%)	31,500
Parents	14,600 (40%)	21,800 (60%)	36,400
Children	18,000 (38%)	29,800 (62%)	47,800

Note: The numbers in this exhibit are estimates based on family participation records submitted by 548 projects, parent records submitted by 545 projects, and child records submitted by 543 projects.

Exhibit reads: In 1995-96, an estimated 31,500 families participated across all 576 projects, of which 19,900 (or 63 percent) were new families, and 11,600 were continuing families from 1994-95.

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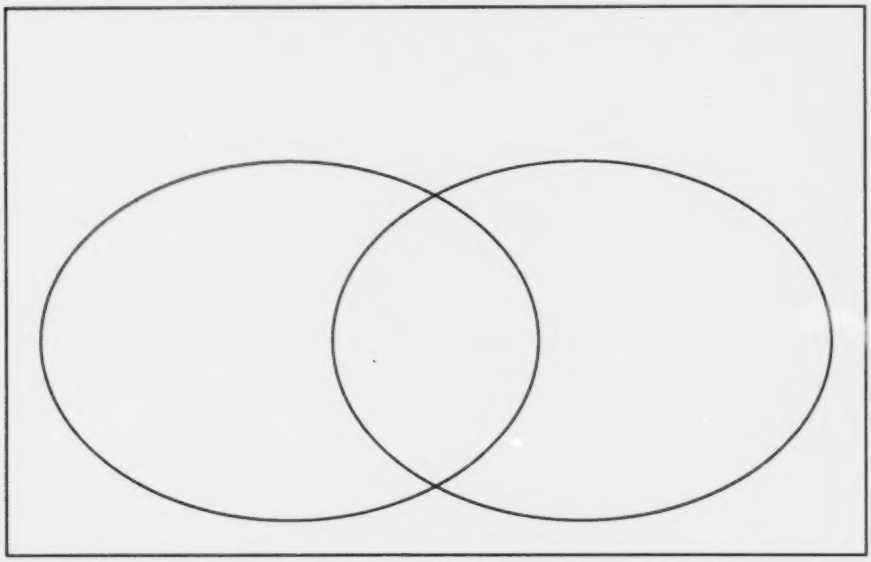
[8] To maximize the amount of information collected on program participants, while containing the extent of data collection burden on Even Start project staff, demographic data were collected only for parents and children enrolled in the Even Start program.

[9] These numbers were estimated for all of 576 projects operating in 1995-96 based on the following numbers of actual participation records we received: 548 projects submitted participation records for 30,001 families (average of fifty-five families per project); 545 projects submitted participation records for 34,440 parents (average of sixty-three parents per project); and 543 projects submitted participation records for 45,103 children (average of eighty-three children per project). Exhibit B.2 in Appendix B lists the distribution of parents (whose participation records were reported) by region, state, and race/ethnicity.

Given the large proportion of new enrollees and gradual shifts expected in participant profiles over the coming years, the discussion of 1995-96 participant characteristics will highlight characteristics of families that enrolled in 1995-96 ("new enrollees") compared to all participants in 1994-95 and all participants in 1995-96 (Exhibit 3.2).[10]

Exhibit 3.2: Universe Study Participants (1995-96)



Note: The numbers refer to the actual numbers of family records received.

Exhibit reads: In 1995-96, 11,054 families were continuing participation from the previous year.

WHAT WERE THE DEMOGRAPHIC CHARACTERISTICS OF EVEN START FAMILIES?

Several shifts in Even Start participant profiles emerged in the 1995-96 evaluation, the most notable change being the increase of teen parents. Other changes reflected, at least in part, this demographic shift. Among the new 1995-96 enrollees, the average ages of parents and children were younger than in 1994-95. A smaller proportion of parents was employed, and a greater proportion was receiving public assistance at the time of enrollment than Even Start families in previous years.

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[10] Family characteristics are collected only once for each family at the time of their enrollment in Even Start. Some participant characteristics are immutable (e.g., gender, birth date,race/ethnicity, relationship to participating child). However, for continuing families, some of the information (e.g., family income, parent educational level) may have changed since initial enrollment.

AGE AND GENDER OF PARTICIPATING PARENTS[11]

The 1995-96 adult participants were somewhat younger (28 years average) than those in 1994-95 (29 years average). This slight decline reflects some demographic shifts among the new enrollees. As shown in Exhibit 3.3, among the new 1995-96 enrollees, the percentages of parents in their 30s and 40s decreased, while the percentage of parents in their 20s rose slightly. The most notable shift in the age of participating parents was among teen parents, who constituted 9 percent of Even Start parents in 1994-95 but 15 percent among 1995-96 new enrollees.[12]

The rise in the proportion of Even Start families headed by teen parents poses new challenges for service delivery. For example, because many of the teen parents may be within the compulsory high-school attendance age, this demographic change may necessitate greater collaboration with high schools and strengthening services for infants and toddlers. Information about teen parents will be highlighted in subsequent chapters that focus on Even Start services and families' participation outcomes.

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[11] The Even Start legislation specifies adult participants as *parents* who are eligible to receive adult education under the Adult Education Act or who are within the state's compulsory school attendance age range. If other caregivers act or serve as the parents of participating children, they are considered the children's parents within the context of Even Start.

[12] Many of the analysis results from the 1995-96 evaluation are presented in comparison with findings from the previous program year, 1994-95. Most of these comparisons present data for *new participants who enrolled in 1995-96* and data for *all program participants in 1994-95*. The 1994-95 evaluation collected demographic data on everyone participating in 1994-95 but did not collect information on the year of enrollment for each family. Thus, we could not distinguish the *1994-95 new enrollees* and *pre-1994-95 enrollees*. Given this constraint, we decided to compare *all 1994-95 participants* against *new 1995-96 enrollees* to detect signs of potential changes in participant characteristics. Such changes would be less apparent if *all 1994-95 participants* were compared to *all 1995-96 participants* since nearly 40 percent of *all 1995-96 participants* continued from 1994-95. The exhibit titles and the narrative text use terms such as *new 1995-96 enrollees* and *families who enrolled in 1995-96* to differentiate them from *1994-95 participants* and *1995-96 participants* referring to *all* participants in each program year. Finally, when an exhibit title simply indicates a program year in parentheses [e.g., (1995-96)], the data refer to *all* participants in the year indicated.

Exhibit 3.3: Percent of Parents, by Age: 1994-95 Participants and 1995-96 New Enrollees

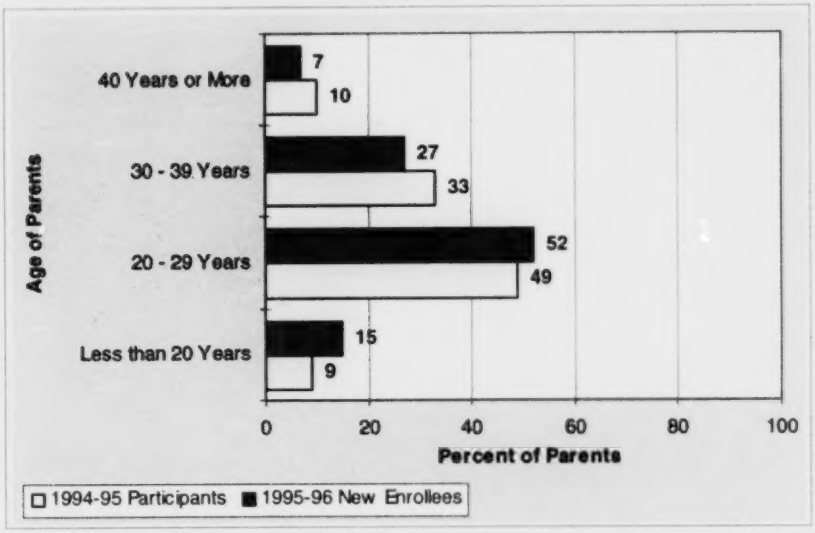

Exhibit reads: 7 percent of parents who enrolled in Even Start in 1995-96 were 40 years or older.

An overwhelming majority of adult Even Start participants are women, primarily the mothers of participating children. The proportion of women increased slightly in 1995-96 to 88 percent from 84 percent the previous year.

AGE AND GENDER OF PARTICIPATING CHILDREN

Any child from birth through age 7 is eligible to receive the core services of the Even Start program. After a child reaches age 8, the parent may continue to participate in adult and parenting education until the parent is no longer eligible for services under the Adult Education Act or for two years, whichever comes first. Until then, a child who otherwise would be ineligible may continue to participate in appropriate project activities.

On average, Even Start children in 1995-96 were younger than those of the previous year. The 1994-95 average age was 4.4 years, while the 1995-96 average was 3.8 years. The average among the new 1995-96 child enrollees was 3.4 years.

Exhibit 3.4 shows that among 1995-96 enrollees, 36 percent of participating children were under 3 years old, compared to 29 percent in the previous program year. Among the new enrollees, the percentage of 3-5-year-olds also was higher than in 1994-95, contributing to the 83 percent of children enrolling in 1995-96 who were 5 years or younger. Conversely, the percentage of children 6 and older has decreased since 1994-95. This pattern reflects a higher percentage of teen parents entering the program. The average age of participating children of teen parents was 1.3 years. In comparison, the average ages of children for older parents ranged from 3.5 for 20-29-year-old parents to 4.9 for parents 40 or older.

As for gender, boys and girls have been represented equally among Even Start children throughout the program's history.

Exhibit 3.4: Percent of Participating Children, by Age: 1994-95 Participants and 1995-96 New Enrollees

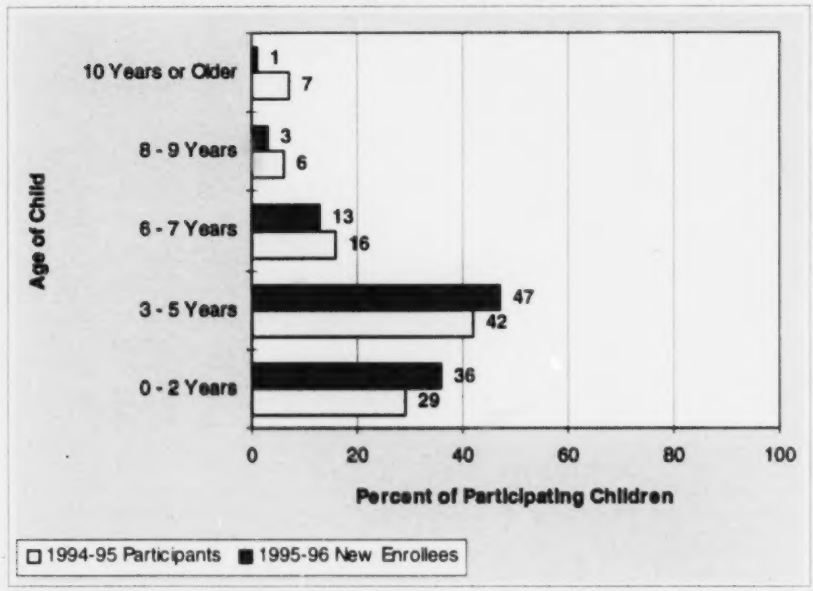

Exhibit reads: 47 percent of children who enrolled in Even Start in 1995-96 were between the ages of 3 through 5 years.

FAMILY STRUCTURE AND SIZE

The composition of Even Start families has remained fairly consistent over the years. Almost half of 1995-96 families had two parents with children, roughly 40 percent were headed by single parents, and about 12 percent were extended families. Among the 1995-96 new enrollees, there was a slight increase in the proportion of extended families (14 percent) and a slight decrease in the percentage of two-parent families (46 percent) (Exhibit 3.5).[13]

These changes may be due largely to the rising enrollment of teen parents and their living arrangements that diverge from the typical Even Start families of previous years. Projects reported that 40 percent of teen parents enrolling in

[13] Our descriptions of Even Start family structure are likely to be approximations. The data collection form for this evaluation does not provide a specific definition for the term "extended family." The term refers somewhat loosely to Even Start families that include additional family members beyond a single-parent or two-parent nuclear family unit living in the same household. The data do not allow us to parse out the possible overlap of a single-parent or a two-parent family living in an extended family. This issue should be kept in mind when interpreting the findings presented about family level data.

1995-96 were single parents, 26 percent were part of two-parent families, and 35 percent lived in extended families. These percentages, especially the much higher percentage of extended families, differ substantially from the "traditional" Even Start family data. Some of the teens reported as single parents may also live with their parents in extended families.

Exhibit 3.5: Percent of Families Who Enrolled in 1995-96, by Family Structure

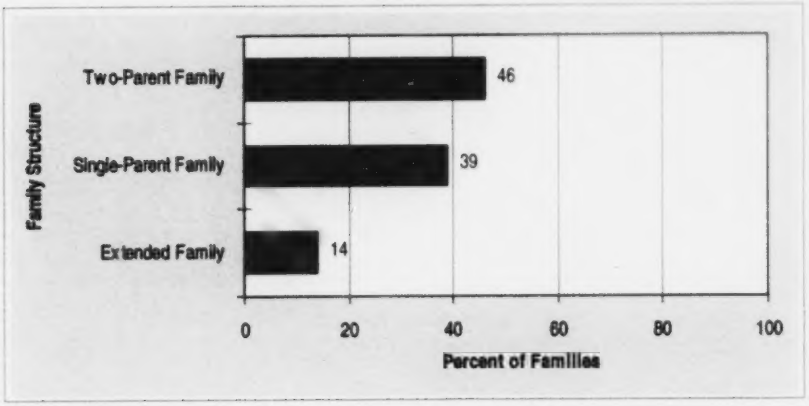

Exhibit reads: In 1995-96, 46 percent of families who enrolled in Even Start were two-parent families.

Similar to the previous program year, the average size of Even Start families was 5.5 persons in 1995-96. As expected, the average family size differed significantly according to the family structure. In 1995-96, on average, single-parent families had five persons, families headed by two parents had six, and extended families had seven.

The number of children in Even Start families also has remained stable over the last several years. Among the 1995-96 new enrollees, 41 percent had one child, and 35 percent had two children in the Even Start eligible age range—birth through age 7 (Exhibit 3.6). Further, a large majority (79 percent) also had one or two children over age 7.

Thus, the most common Even Start family structure was a couple, between the ages of 20 and 39, with three to four children. However, another large group of families was headed by single parents with approximately four children.

Data on the relationship between the participating adults and children show that almost all adult participants, approximately 97 percent, were the parents of participating children. In only a very small percentage of families, grandparents (1.5 percent) or other adults (1.6 percent), instead of children's parents, received Even Start services.

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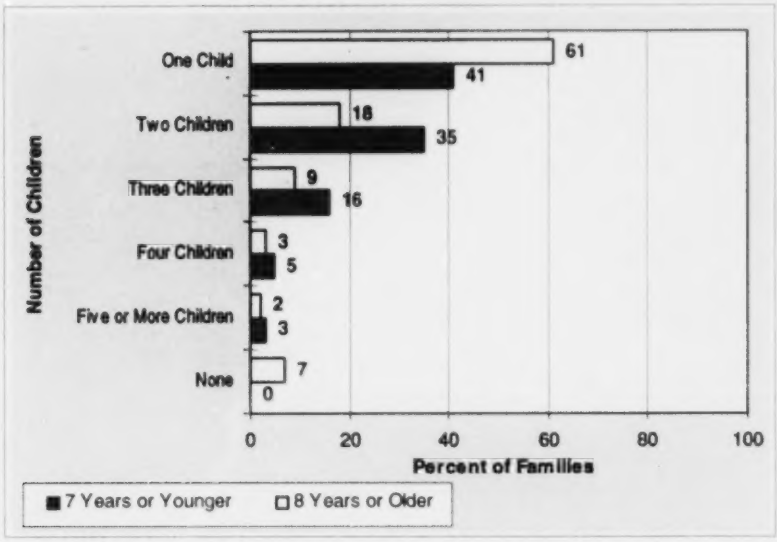
Exhibit 3.6: Percent of Families Who Enrolled in 1995-96, by Number and Age of Children



Note: The number of children in Exhibit 3.6 refers to the total number of children in the household. It is not exclusive to Even Start participating children.

Exhibit reads: 61 percent of families who enrolled in Even Start in 1995-96 had one child 8 years or older, and 100 percent had one child 7 years or younger.

FAMILY ECONOMIC STATUS AT INTAKE

The Even Start projects are required to target their services to low-income families with limited literacy skills. The data clearly indicate that the participating families represent the economically disadvantaged segment of the population.

As shown in Exhibit 3.7, more than 80 percent of Even Start families in the last two program years had annual incomes below $15,000. On average, these families had five to six members in their households. The 1996 federal poverty level was $15,911 for a family of four. Thus, most Even Start families had incomes substantially below the federal poverty level.[14]

A large proportion of families reported extremely low incomes; 42 percent of 1995-96 enrollees earned and/or received annual incomes of less than $6,000.

[14] Since the family income data were reported in income ranges (e.g., $3,000-$5,999), and because of the inconsistent references to *family* and *household*, we could not determine precisely whether a family was below the federal poverty level. However, using a "conservative" estimate based on the upper limits of these ranges and the number of people living in the same household, we estimate that 88 percent of Even Start families participating in 1995-96 had incomes at or below the federal poverty level.

The levels of income among Even Start families have remained consistent since 1992-93, when 82 percent of families had annual incomes below $15,000 and 35 percent of families had annual incomes below $5,000.[15]

Exhibit 3.7: Percent of Families, by Family Annual Income: 1994-95 Participants and 1995-96 New Enrollees

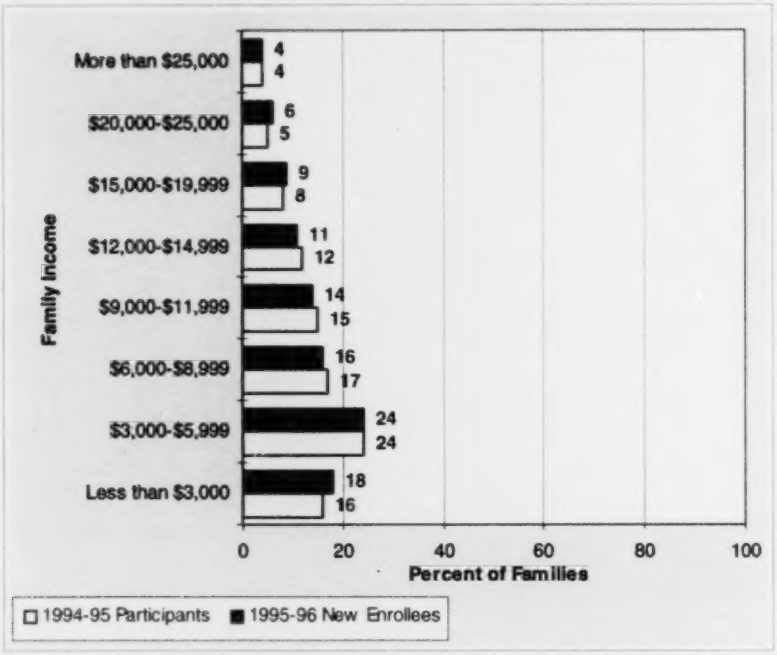


Exhibit reads: 4 percent of families who enrolled in Even Start in 1995-96 had an annual income above $25,000.

SOURCES OF FAMILY INCOME

Among the families who enrolled in Even Start in 1995-96, 46 percent reported that their primary source of income was employment wages, while 47 percent relied on government assistance as their major source (Exhibit 3.8).

The sources of income listed as "Other" included alimony and child support (1.8 percent) and various forms of government assistance such as Social Security, Supplementary Support Income (SSI), pensions and retirement benefits, and a combination of wages and government assistance (5.4 percent). The percentages of wages and government assistance were comparable to those reported for the 1992-93 and 1994-95 program years.

[15] The income ranges used in the previous evaluation do not coincide exactly with the ranges used in the current evaluation.

Exhibit 3.8: Percent of Families Who Enrolled in 1995-96, by Primary Source of Income

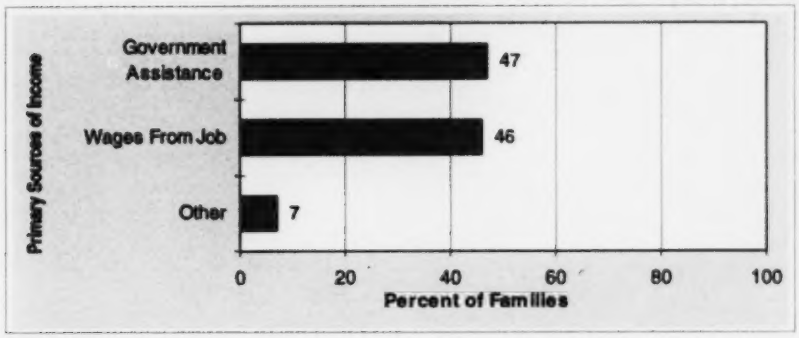


Exhibit reads: 47 percent of families who enrolled in Even Start in 1995-96 relied primarily upon government assistance for income.

The number of Even Start families receiving welfare increased in 1995-96. Fifty-five percent of parents who enrolled in 1995-96 said they had received welfare benefits before enrolling in Even Start, and 53 percent reported receiving welfare at the time of enrollment (whether or not this was their primary source of income). Among 1994-95 participants, the comparable percentages were 44 and 43, respectively. Although the level of Even Start family income from all sources has remained fairly stable over the last several years, the percentage of families receiving public assistance at the time of enrollment has increased substantially.

The increase in the percentage of new enrollees receiving welfare may be due in part to the increase in teen parents. More than 60 percent of teen parents enrolling in 1995-96 were receiving government assistance at the time of enrollment; the percentage was much lower (44 percent) for parents in their 30s (Exhibit 3.9). Further, 56 percent of teen parents enrolling in 1995-96 relied on government assistance as the primary source of income, compared to 35 percent to 46 percent of older parent groups.

Exhibit 3.9: Percent of 1995-96 New Enrollees Receiving Government Assistance at the Time of Enrollment, by Parents' Age

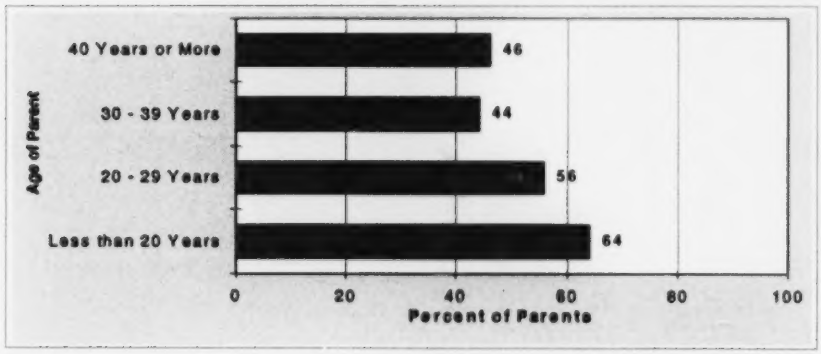


Exhibit reads: Among 1995-96 enrollees, 46 percent of parents 40 years or older were receiving government assistance at the time of enrollment.

PARENTS' EMPLOYMENT STATUS AT ENROLLMENT

Employment status is an important indicator of a family's capacity for self-sufficiency and likely will become more critical to Even Start participants in the context of welfare reform.

Wages from employment represented the primary source of income for 46 percent of Even Start *families* who enrolled in 1995-96. However, only 23 percent of *participating parents* from those families were employed at the time of intake. Given that almost half of Even Start families were headed by couples, many of these families may depend on the earnings of one parent, while the other non-employed parent participates in Even Start.[16] The employment rates varied by parents' age: 16 percent of teen parents were employed, compared to 23 percent, 30 percent, and 32 percent of parents in the 20-, 30-, and 40-years-or-older groups, respectively.

Of the parents who were employed at the time of enrollment in 1995-96, slightly more than half (52 percent) had full-time jobs; 44 percent had part-time jobs, and 3 percent were in job training programs. The rate of full-time employment was slightly lower among the new enrollees compared to the 58 percent reported by the 1994-95 participants. While the majority of new parents were not employed at enrollment, 47 percent were enrolled in educational programs not directly affiliated with Even Start, and 15 percent were actively seeking work (Exhibit 3.10).

[16] This evaluation collects data on parents' employment status only from participating parents. While about 50 percent of families are two-parent families and another 12 percent are extended families, we have data on multiple adults for slightly more than 10 percent of families. Thus, further analysis of data cannot resolve the seeming inconsistency between employment rate and job earnings being the primary source of family income.

Exhibit 3.10: Employment Plans of Parents Who Were Not Employed at Enrollment: 1994-95 Participants and 1995-96 New Enrollees

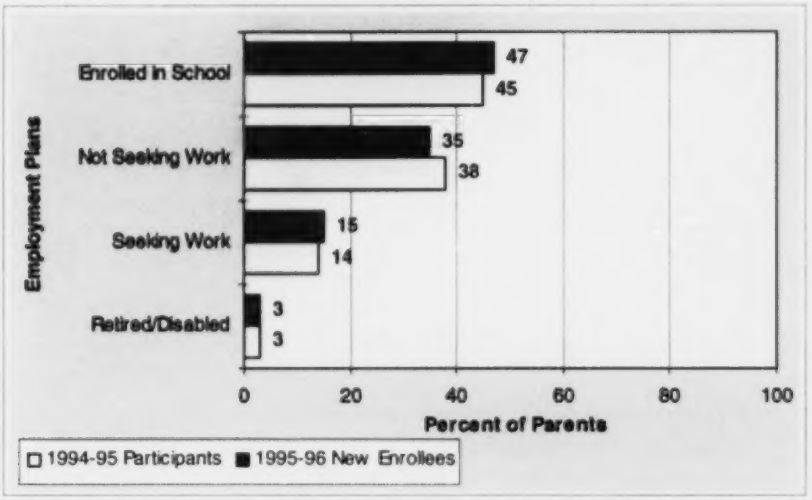


Exhibit reads: 47 percent of unemployed parents who enrolled in Even Start in 1995-96 were enrolled in school.

WHAT WERE THE EVEN START PARTICIPANTS' NEED FOR EDUCATIONAL SERVICES?

Even Start is designed to target families most in need of its services based on two primary criteria: low income and low level of adult literacy skills. Projects also may consider other need-related factors in targeting and recruiting families.

As a group, Even Start parents' educational backgrounds vary widely.[17] The percentages of parents representing various levels of prior educational experiences have remained fairly consistent in the last two program years. A large majority of parents enroll in Even Start without high school diplomas or GEDs.

PARENTS' EDUCATIONAL BACKGROUND

As shown in Exhibit 3.11, a complete lack of formal schooling was rare, reported by only 2 percent of parents enrolling in 1995-96. However, the highest grade

[17] Throughout this report, descriptions of parent characteristics refer to parents participating in Even Start because this evaluation collects background information only for participating parents. If one parent from a two-parent family participates, characteristics such as years of education completed and English language proficiency of the *participating parent* are represented in the analysis results.

completed for 30 percent of 1995-96 enrollees was between the 7th and 9th; 12 percent of new enrollees had not progressed beyond the primary school grades. The most common category (43 percent) was comprised of parents who had reached the latter half of high school (10th to 12th grade) but had not finished. Compared to one year earlier, there was a slight increase in parents needing to complete one or two years of high school and a slight decrease in parents who had finished high school or earned their GED prior to Even Start.

Compared to 1992-93, the pre-Even Start educational achievements of parents decreased in the two years from 1994 to 1996. The percentage of adults with no high school diploma or GED at the time of intake in 1992-93 was 79 percent for participating parents. In contrast, about 85 percent of 1995-96 enrollees had neither completed high school nor earned a GED.

Exhibit 3.11: Percent of Parents, by Educational Background at Enrollment: 1994-95 Participants and 1995-96 New Enrollees

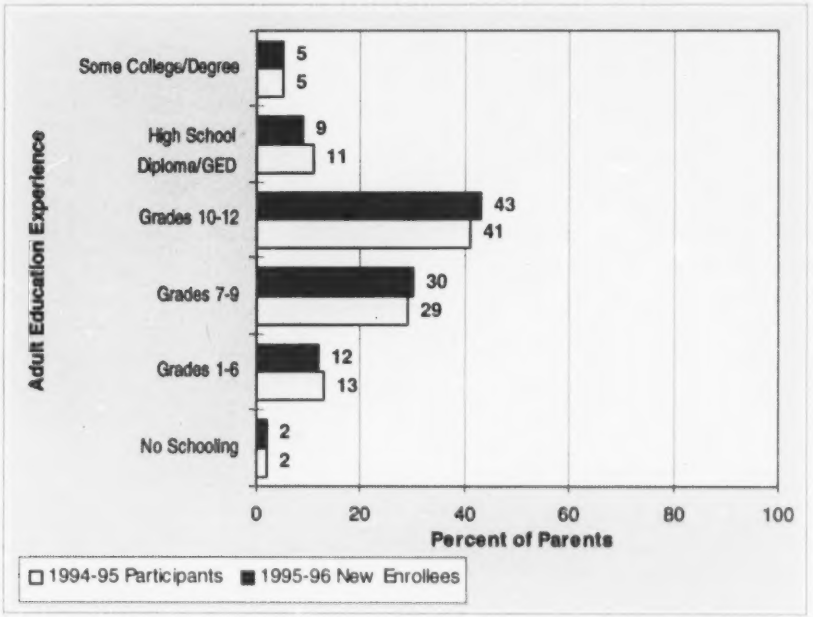


Exhibit reads: 5 percent of parents who enrolled in Even Start in 1995-96 had postsecondary schooling before enrolling in Even Start.

The prevalence of parents lacking only a few years of secondary education may be an indicator of educational goals of many Even Start parents. Parents who need only a few years of adult education to obtain their GED may be more likely to enroll in a family literacy program than those requiring many more years of adult education. For the projects, parents with very low levels of education may pose greater difficulties, such as designing an effective curriculum and retaining them in the program over several years.

EXPERIENCE WITH ADULT EDUCATION AND EMPLOYMENT TRAINING

For the majority of Even Start parents, Even Start was their first experience with adult education programs. At most, 41 percent of parents had participated in some form of adult education before enrolling in Even Start, mostly at the level of secondary education and GED preparation (Exhibit 3.12). Despite the high percentage of parents with limited English proficiency (31 percent of the 1995-96 new enrollees), only 12 percent had participated in ESL programs before Even Start. Similarly, while roughly 14 percent of parents enrolled in Even Start with a 6th-grade or lower education, only 7 percent of the 1995-96 enrollees had previously participated in beginning or intermediate adult basic education.

However, the percentage of parents with prior adult education experience increased slightly from 1994-95 to 1995-96. Over these two years, the number of parents who previously had participated in secondary level adult education programs increased from 16 percent to 22 percent. This was, to a large degree, a function of the rise in teen parent enrollment across these two years.

Exhibit 3.12: Percent of Parents, by Previous Adult Education Experiences: 1994-95 Participants and 1995-96 New Enrollees

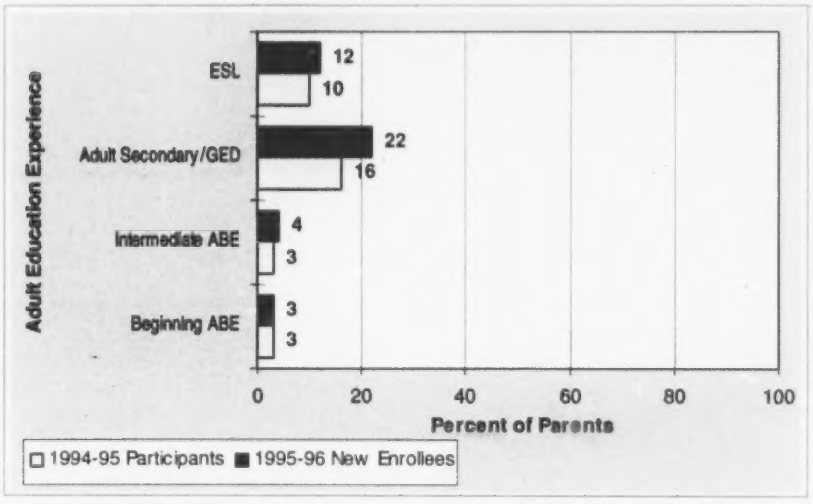


Exhibit reads: 12 percent of parents who enrolled in Even Start in 1995-96 had participated in ESL services before Even Start.

Generally, Even Start parents were young adults who had completed some high school at the time of intake. These background factors may explain why only a small percentage had participated in employment or vocational training before or at the time of enrolling in Even Start (Exhibit 3.13). Although more than 50 percent of enrolling parents had reached 10th grade or higher, few had received any form of vocational education. In addition to lacking a high school diploma or GED, most parents had received no job skills training before Even Start.

Exhibit 3.13: Percent of Parents, by Job Training History Before and at Time of Enrolling in Even Start in 1995-96

	Before Even Start	At Enrollment
Employment Training	7%	4%
Vocational Education	5%	3%
Vocational Rehabilitation	1%	<1%

Exhibit reads: 7 percent of parents who enrolled in Even Start in 1995-96 had received employment training prior to enrolling in Even Start; 4 percent were receiving employment training at the time of enrollment.

RACIAL/ETHNIC BACKGROUND AND LENGTH OF RESIDENCE IN THE UNITED STATES

The racial/ethnic backgrounds of the Even Start families have several implications for both the design and the delivery of Even Start services. Ethnicity is related to the languages families use at home and to their level of English proficiency. In addition, racial/ethnic and cultural diversity among participating families presents both advantages and challenges for adult and child education services.

In multi-racial/ethnic communities, educational activities can serve as opportunities for people to interact with members of different ethnic groups, providing benefits for individuals and the community beyond the specific educational objectives. At the same time, ethnic, cultural, and linguistic diversity increases the difficulty of developing culturally sensitive and appropriate instructional materials and approaches.

The Even Start community includes a wide spectrum of racial/ethnic backgrounds, and notable changes in the relative mix of major racial/ethnic groups have occurred since the program began.[18]

Exhibit 3.14 shows that since 1992-93 the proportion of Hispanic families in Even Start has increased substantially, reaching 38 percent among the 1995-96 enrollees. The second largest racial/ethnic minority group among the new enrollees was African American, representing roughly one-quarter of Even Start families. Asian, American Indian, and other racial/ethnic groups collectively (not shown in exhibit) constituted 8 percent of the 1995-96 enrollees.

[18] For most of the analyses that incorporated the "family" race/ethnicity, the race/ethnicity of participating parents was used.

Exhibit 3.14: Racial/Ethnic Backgrounds of Even Start Parents: 1992-93 Participants, 1994-95 Participants, and 1995-96 New Enrollees

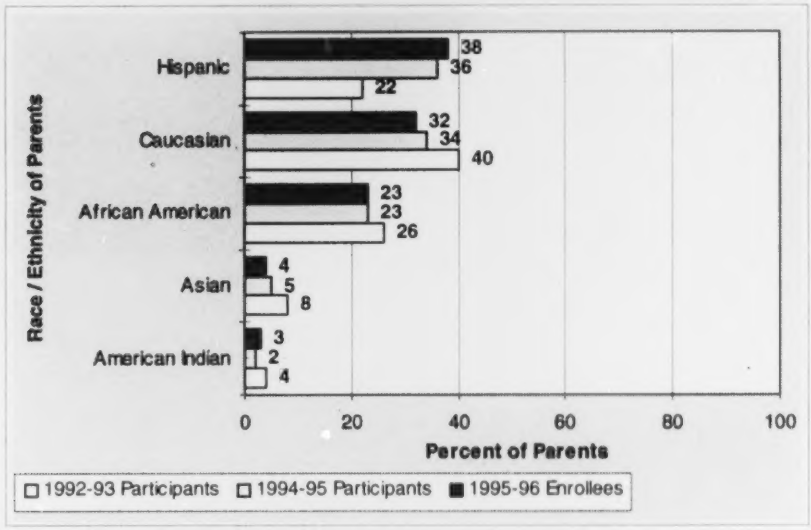


Exhibit reads: 38 percent of parents who enrolled in Even Start in 1995-96 were Hispanic.

The distribution of racial/ethnic groups varied in different regions of the country. Exhibit 3.15 shows that Hispanic families were concentrated primarily in the South and West. (Exhibit B.2 in Appendix B provides state-by-state data on the racial/ethnic composition of Even Start parents.)

Exhibit 3.15: Racial/Ethnic Backgrounds of Even Start Parents, by Region: 1995-96 Participants

Racial/Ethnic Group	Northeast	South	Midwest	West
Hispanic	23%	34%	18%	68%
Caucasian	49%	30%	48%	13%
African American	22%	33%	20%	4%
Asian	4%	1%	8%	8%
American Indian	1%	1%	5%	6%
Other	1%	1%	1%	1%

Exhibit reads: In the northeast region, 23 percent of families participating in 1995-96 were Hispanic families.

While Hispanic and Asian families are represented in all regions, their above-average concentration in some states suggests that the need for ESL programs is particularly critical in these areas (see Exhibit 3.15 above and Exhibit B.2 in Appendix B). States where more than 50 percent of Even Start parents were Hispanic were Arizona, California, Colorado, District of Columbia, Idaho, Nevada, New Mexico, Oregon, Puerto Rico, Rhode Island, Texas, and Utah.

The Asian and Pacific Islander families comprised a small percentage of the Even Start population (5 percent of 1995-96 participants). States where more than 10 percent of Even Start parents were Asian were Hawaii, Minnesota, Nebraska, Rhode Island, Washington, and Wisconsin.

African American families represented the second largest racial/ethnic minority group in Even Start (23 percent of all 1995-96 participants). They were most prevalent in the South (64 percent). States where more than 50 percent of Even Start parents were African American were Alabama, Delaware, Georgia, Maryland, Mississippi, North Carolina, and South Carolina.

Altogether, the number of American Indian families in Even Start was small (2 percent of all 1995-96 participants). States where more than 20 percent of Even Start parents were American Indian were Alaska, Oklahoma, Montana, North Dakota, South Dakota, and Utah. Of the 801 parents who identified themselves as American Indian, only 225 (28 percent) were enrolled in the nine special set-aside, tribal Even Start projects. The majority participated in state-administered, non-set-aside projects.

As reported earlier, two-parent families represented 46 percent of the new enrollees, and single-parent families represented 39 percent. However, a large majority (69 percent) of African American families who enrolled in 1995-96 were headed by single parents (Exhibit 3.16). Thus, many African American parents participating in Even Start may experience the social, economic, and parenting difficulties associated with single-parent families. Single-parent families also were more prevalent among American Indians and less prevalent among Hispanics and Asians, compared to the program-wide percentage.

Exhibit 3.16: Percent of Families Who Enrolled in 1995-96, by Family Structure and Parent Race/Ethnicity

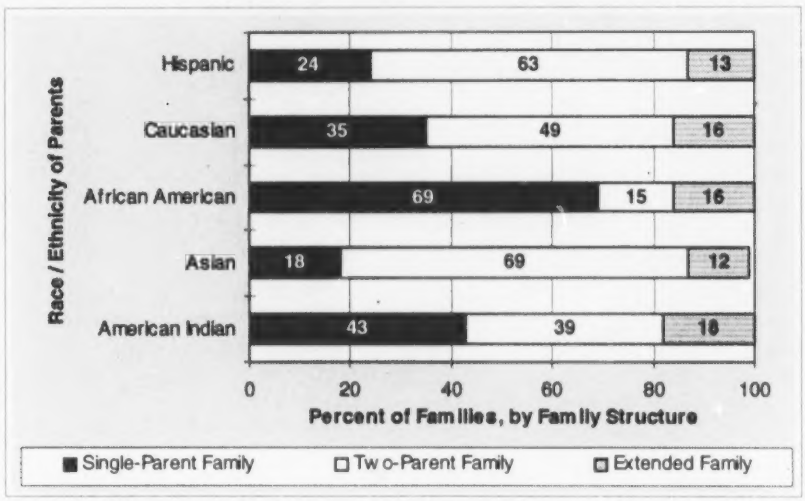


Exhibit reads: 24 percent of Hispanic families who enrolled in 1995-96 were single-parent families; 63 percent were two-parent families; and 13 percent were extended families.

The Hispanic and Asian families in Even Start were less impoverished as a group compared to other racial/ethnic minority groups; however, they were more likely to experience problems related to limited English proficiency than other families. Thirty percent of Hispanic families and 39 percent of Asian families

who enrolled in 1995-96 had lived in the United States for five or fewer years at the time of enrollment (Exhibit 3.17).[19] It is more probable that many families who have had a short length of residence in the United States experience problems with their second language.

Exhibit 3.17: Percent of Families Who Enrolled in 1995-96, by Race/Ethnicity and Length of Residence in the United States

	Less Than One Year	One to Five Years	More Than Five Years	TOTAL
Hispanic	7%	23%	70%	100%
Caucasian	1%	1%	98%	100%
African American	1%	2%	97%	100%
Asian	7%	32%	60%	99%
American Indian	< 1%	1%	98%	100%

Exhibit reads: 7 percent of Hispanic families who enrolled in Even Start in 1995-96 had lived in the United States for under one year.

As shown in Exhibit 3.18, the western region had the largest proportion of recent immigrants (23 percent), while the percentages in the other regions were 10 percent to 12 percent.

Exhibit 3.18: Percent of Families Who Enrolled in 1995-96, by Region and Length of Residence in the United States

	Less Than One Year	One to Five Years	More Than Five Years	TOTAL
Northeast	2%	8%	90%	100%
South	3%	8%	89%	100%
Midwest	3%	9%	88%	100%
West	4%	19%	77%	100%

Exhibit reads: 2 percent of 1995-96 new families who enrolled in Even Start projects in the Northeast had lived in the United States for under one year.

[19] For families in which various family members immigrated to the United States at different times, the data collection instrument asked for the longest period of residence in the United States by any family member. This instruction was problematic in cases where family members who immigrated first were not participating in Even Start and the "late comers" were the participants in Even Start. In these families, "the (longest) length of residence in the United States" may suggest greater English proficiency for the family than the actual extent of language difficulties that the *participating family members* may be experiencing. While the written instructions in the data collection instrument were not revised, local projects were instructed to report the length of residence for the *participating* members of the family, as appropriate.

ESL PARENTS' ENGLISH PROFICIENCY

Roughly 7,600 parents who enrolled in 1995-96 reported speaking languages other than English at home at the time of enrollment. This accounts for more than one-third (38 percent) of all new families. This is not surprising, since over 40 percent of Even Start parents are Hispanic, Asian, or Pacific Islanders. Since 1992-93 there has been a gradual increase of families who use Spanish at home, reflecting the increase of Hispanics in the Even Start program. In 1992-93, 26 percent of all Even Start families spoke Spanish at home, compared to 29 percent in 1994-95 and 31 percent among the 1995-96 enrollees.

About one-fourth of the parents who spoke a language other than English at home could understand, speak, and read English well or very well.[20] However, the remainder of these parents had difficulties in understanding, speaking, and/or reading English (Exhibit 3.19). They were more limited in their reading and speaking abilities; about 30 percent of parents who reported speaking languages other than English at home were unable to read and/or speak English at all.

Exhibit 3.19: Percent of ESL Parents Who Enrolled in 1995-96, by English Proficiency Level

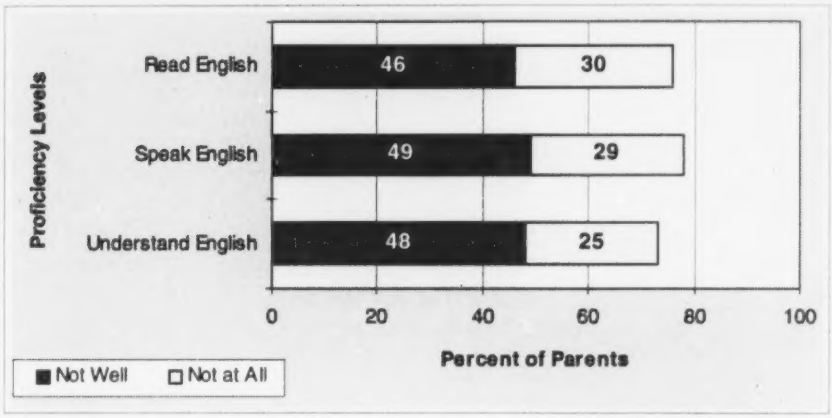


Exhibit reads: 30 percent of non-English-speaking parents who enrolled in 1995-96 could not read English at all.

While a majority of parents reported having reached at least the 10th grade, 33 percent of the 1995-96 enrollees had received most of their previous schooling outside the United States. We examined the average levels of education (at the time of enrollment) by racial/ethnic group and age of parent. Exhibit 3.20 displays the average years of education completed.

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[20] These parents constituted 8 percent of all Even Start parents in 1995-96. Their educational backgrounds ranged from primary grades to postsecondary education. Few parents (less than 1 percent of all Even Start parents) were not native English speakers, but were proficient in English, and had at least a high school diploma.

The educational levels of primarily English-speaking groups (i.e., Caucasian, African American, and American Indian parents) averaged around the 10th grade and were relatively similar across these groups (Exhibit 3.20, the right-most column). However, the Hispanic and Asian parents' educational experiences averaged around the 8th grade—notably lower than the non-ESL groups' averages. Hispanic and Asian parents, on average, had less formal education than Caucasian, African American, and American Indian parents.

Exhibit 3.20 (the bottom row) also shows that the average educational levels were fairly constant across parents' age groups, with the exception of the parents aged 40 or older, who averaged about one grade level lower than younger parents.

Exhibit 3.20: Average Years of Education Completed at Enrollment, by Parent Age and Race/Ethnicity (1995-96)

	Younger Than 20 Years	20-29 Years Old	30-39 Years Old	40 Years or Older	Average Across All Age Groups
Hispanic	8.6	8.2	6.8	9.0	**8.3**
Caucasian	10.0	10.3	9.9	9.6	**10.0**
African American	10.2	10.2	9.6	9.7	**10.1**
Asian	7.4	7.9	6.8	9.2	**7.6**
American Indian	10.5	10.5	8.7	9.7	**10.3**
Average Across All Racial/Ethnic Groups	**9.5**	**9.5**	**9.2**	**8.2**	**9.3**

Note: The years of education correspond to academic grades (e.g., 1=1st grade, 9=9th grade).

Exhibit reads: Among parents who participated in Even Start in 1995-96, Hispanic parents younger than 20 years had reached, on average, the 9th grade in high school.

CHILDREN'S PARTICIPATION IN NON-EVEN START PROGRAMS

For many children, Even Start provided their first experience in early childhood education. As shown in Exhibit 3.21, the percentage of children with no educational experiences prior to Even Start was substantially higher among the 1995-96 enrollees (57 percent) than among the 1994-95 participants (43 percent). Among the new enrollees, the most common pre-Even Start programs children had experienced were kindergarten and Head Start (12 percent each).

Exhibit 3.21: Percent of Children Participating in Non-Even Start Educational Programs Before Enrolling in Even Start: 1994-95 Participants and 1995-96 New Enrollees

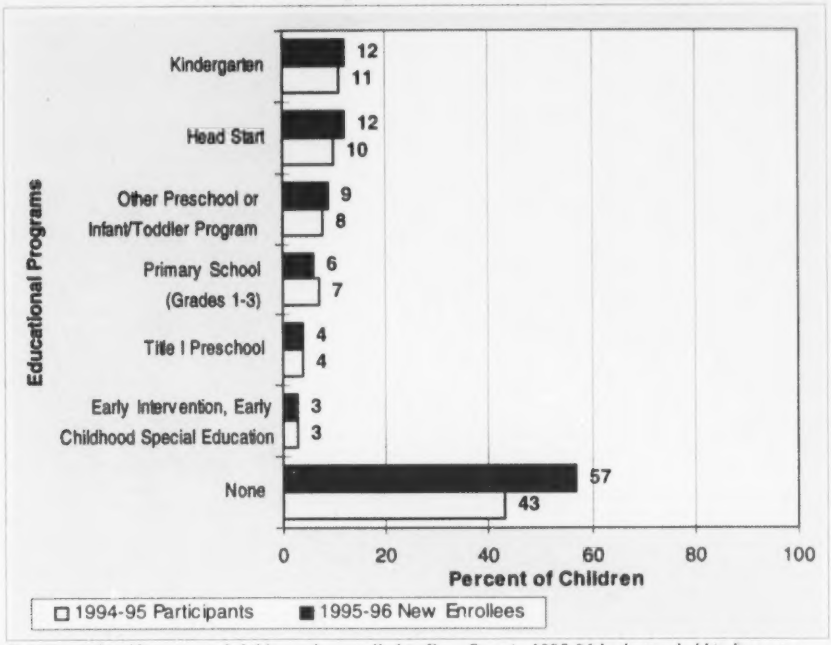

Exhibit reads: 12 percent of children who enrolled in Even Start in 1995-96 had attended kindergarten prior to enrolling in Even Start.

For 50 percent of children who enrolled in 1995-96, Even Start was the only educational program in which they were participating at the time of intake, compared to 38 percent among the 1994-95 participants (Exhibit 3.22). The other children who enrolled in 1995-96 were attending primary schools (11 percent), kindergartens (10 percent), and Head Start (9 percent) in addition to Even Start. Most of the educational services these children received in addition to Even Start also were public programs.

Exhibit 3.22: Percent of Children Participating in Non-Even Start Educational Programs at Enrollment: 1994-95 Participants and 1995-96 New Enrollees

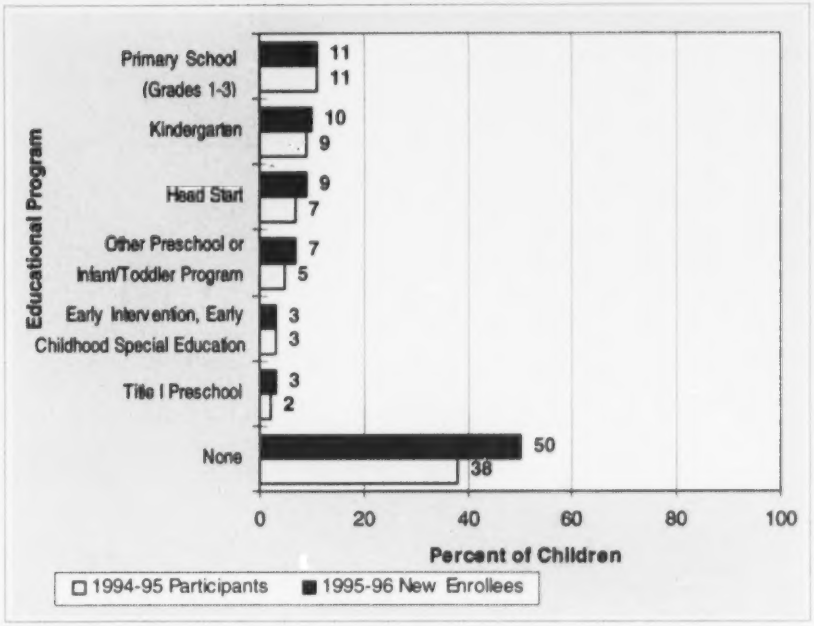

Exhibit reads: 11 percent of children who enrolled in Even Start in 1995-96 were attending primary school at the time of enrollment.

How Many Children Have Special Needs?

Project staff are asked each year to indicate whether a child had been identified as having any special needs.[21] Twelve percent of Even Start children participating in 1995-96 were reported to have special needs, which is consistent with the national average.[22] The prevalence of children with special needs in Even Start is comparable to the 13 percent of such children in the Head Start Program.

As shown in Exhibit 3.23, the most common type of special need was speech/language impairment (42 percent of children with special needs),

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[21] The Even Start statute requires each applicant project to describe the methods it will use to provide services to individuals with special needs, such as limited English proficiency and physical and/or learning disabilities.

[22] We did not ask who identified the presence of special needs (e.g., Even Start staff, medical professionals, child's parents). Even Start staff may assume the primary responsibility for identifying needs that are directly related to education, such as specific learning disabilities. Other types of needs (e.g., visual, hearing, and orthopedic impairment) may involve testing by medical professionals.

followed by developmental delays (33 percent). Fifteen percent of the special-needs children had been diagnosed with a specific learning disability.

Exhibit 3.23: Percentage Distribution of Children with Special Needs, by Type of Needs (1995-96)

Type of Special Needs	Percent
Speech/language impairment	42%
Developmentally delayed	33%
Specific learning disability	15%
Serious emotional disturbance	6%
Visual impairment	5%
Hearing impairment	5%
Orthopedic impairment	5%
Mental retardation	3%
Other	20%

Note: The percentages are based on 5,123 children whom Even Start staff described as having special needs. Multiple disabilities could be reported for each child.

Exhibit reads: In 1995-96, 42 percent of children who were identified as having special needs were reported to have speech/language impairments.

PARENTS' REASONS FOR PARTICIPATING IN EVEN START

Parents' reasons for participating in Even Start indicate both the parents' assessment of their needs for Even Start services and their goals for participation. The reasons also provide information about the type of services that the projects need to provide in order to maximize retention.

As Exhibit 3.24 shows, educational advancement for themselves was the most common reason that parents cited for enrolling in Even Start in 1994-95 and 1995-96 (39 percent and 42 percent, respectively). The next most common reasons, although much less frequent than the first, were to learn English, a desire to improve their child's school success (both 12 percent), and to be better parents (10 percent in 1994-95 and 8 percent in 1995-96). This response pattern has been consistent for three years.

It should be noted that the intake questionnaire asks parents to state the single most important reason for enrolling. Many parents who checked "Other" indicated that they had multiple reasons for enrolling, and many of the written answers were combinations of several reasons listed in Exhibit 3.24.

Exhibit 3.24: Percent of Parents, by Reason for Participating in Even Start: 1994-95 Participants and 1995-96 New Enrollees

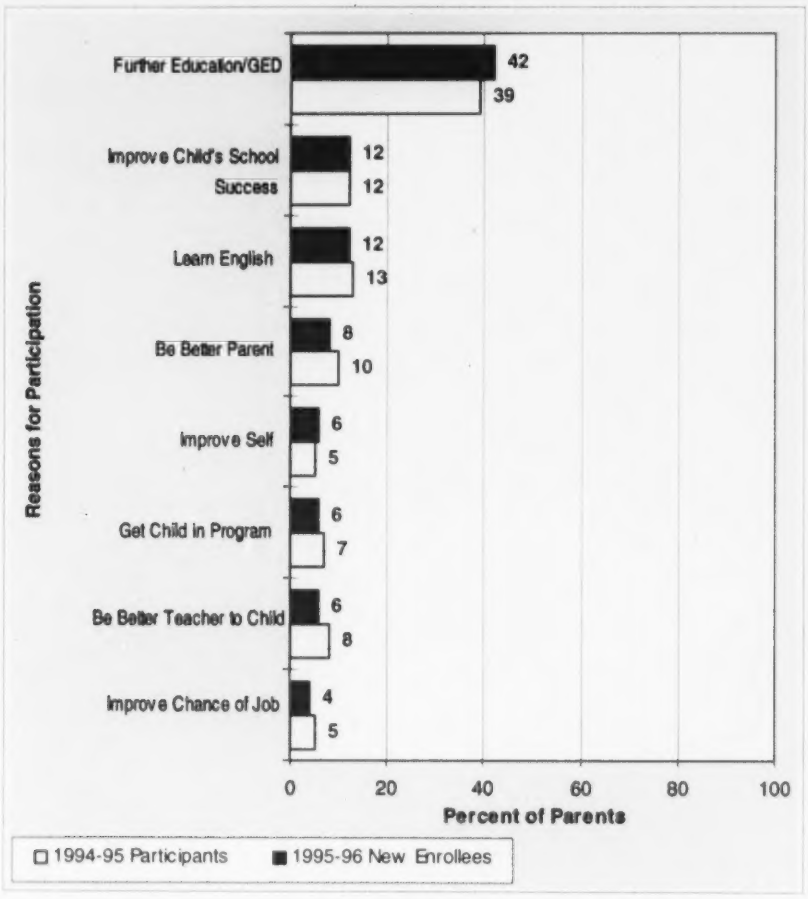

Exhibit reads: 42 percent of parents who enrolled in Even Start in 1995-96 stated their main reason for enrolling in Even Start was to further their education and/or to obtain a GED.

CHAPTER 4: WHAT SERVICES DO EVEN START PROJECTS PROVIDE TO PARTICIPANTS?

Even Start projects are required to provide participants with services in three core components: adult basic education or adult literacy, parenting education, and early childhood education. Furthermore, projects must provide some services in the families' homes and through parent-child joint activities. Projects also must include support services such as transportation and childcare to ensure participants' ability to attend the educational activities offered. Even Start is often referred to as the "glue" that binds together existing services available from non-Even Start programs in the community to meet participants' needs and schedules.

This chapter describes characteristics of the Even Start program design and curriculum for the core educational services. The discussion also addresses recruitment and screening practices; methods used to target families most in need; flexibility in scheduling services; and support services that enable families to participate in core services.[23]

This chapter introduces a new analytical factor available for the first time in this evaluation: project age, or the number of years each project has operated an Even Start program. Use of project age information allows us to examine projects' service delivery in light of their experience or maturity.

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[23] This chapter and Chapter 9 present information about Even Start projects. The current evaluation collects project-related data on two levels. Some data are collected for each individual project as a unit; that is, each project provides descriptions for the entire project. However, some projects have implemented different educational models at different project sites. In these cases, detailed descriptions of services offered to participants are reported by sites.

In the context of this evaluation, the term "site" does not necessarily refer to a physical or geographical location where a project's services are provided. Instead, the term corresponds to service-delivery designs. Some projects have two or more distinctly different types of approaches (e.g., services designed for teen parents enrolled at a high school and a different set of services designed for older parents delivered through collaboration with a community college and a Head Start program). Projects were instructed to report separate information on multiple sites/designs if they use more than one service-delivery approach.

Among the 563 projects that submitted data for 1995-96, 91.2 percent had one site/design; 5.4 percent had two sites/designs; and 3.5 percent had three to six sites/designs. The total number of project sites reported in 1995-96 was 635. Results of analyses based on project sites are noted as such in the exhibits and in the text in Chapters 4 and 9.

In 1995-96, project age ranged from less than one year to seven years. For many of the analyses, projects were grouped into three age categories: (1) First-year projects, which had less than two years' experience (21 percent); (2) second/third-year projects (42 percent); and (3) "mature" projects, which had four or more years of experience (37 percent).[24]

WHERE ARE EVEN START PROJECTS LOCATED?

In 1995-96, Even Start projects were located in all 50 states, the District of Columbia, and Puerto Rico. Of the 576 projects operating in 1995-96, 563 submitted project-characteristics data. Eight tribal projects and nine Migrant Education projects were included in the total.

As shown in Exhibit 4.1, the South was home to the highest percentage of Even Start projects (40 percent), while the Northeast was home to the lowest (17 percent). (Exhibit B.3 in Appendix B provides a detailed list of the number of projects by type of project, state, and region.) Twenty-two percent of the projects were located in the Midwest, and the final 21 percent in the West. This was similar to the regional distribution in the two previous program years.

The greater concentration of projects in the South is related to the higher poverty rates in that region relative to other regions. Even Start funding is based on the Title I funding formula, which in turn is based on the percentage of school children from low-income families.

Exhibit 4.1: Distribution of Projects, by Region (1995-96)

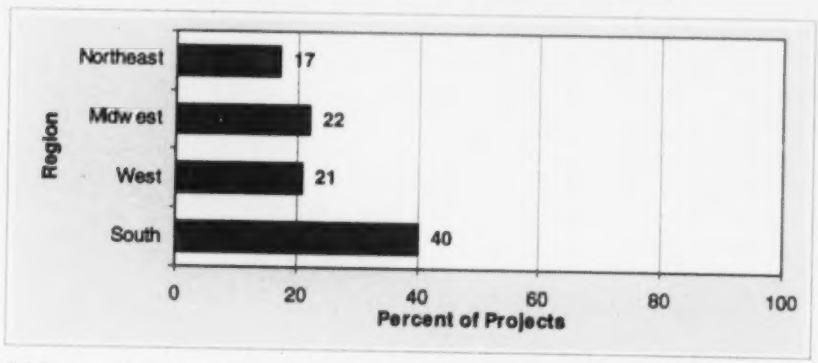


Exhibit reads: In 1995-96, 17 percent of Even Start projects were located in the Northeast.

[24] Consideration of the following issues produced this grouping: (1) to sharpen comparisons between very new projects and projects with several years of Even Start experience; (2) to keep the number of groups fairly small to ensure ease in interpreting analysis results; and (3) to ensure that each group represented a sizable portion of all projects.

Also similar to previous findings, the majority (51 percent) of projects operated in rural areas. Thirty-five percent operated in urban areas, and 15 percent operated in areas that included both urban and rural communities.

WHAT NON-EVEN START SERVICES ARE AVAILABLE IN COMMUNITIES?

As shown in Exhibit 4.2, many types of educational services provided by Even Start also were available through other programs in the communities where the projects operated (the term "community" here connotes "service area" for each local project). The most widely available services were adult secondary education and GED preparation (87 percent), followed closely by early childhood education for preschoolers (80 percent), adult basic education (77 percent), and early childhood education for 5-year-olds (76 percent).

Family literacy programs, early childhood education for infants and toddlers, and parenting education were available only in 16 percent, 26 percent, and 46 percent of communities, respectively. Thus, Even Start makes special, unique contributions to these educational services in many communities.

Exhibit 4.2: Percent of Projects Reporting Availability of Non-Even Start Educational Services in Their Communities (1995-96)

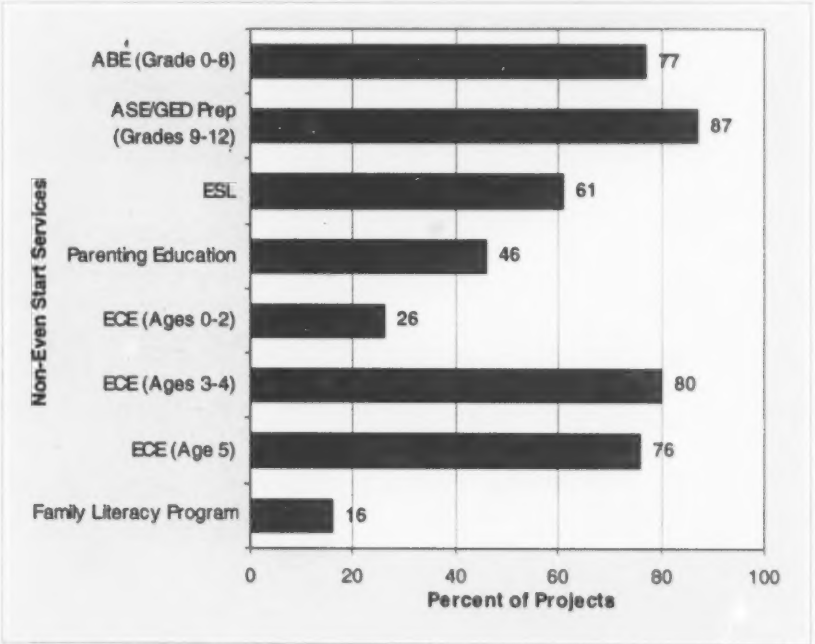


Exhibit reads: In 1995-96, 77 percent of Even Start projects reported that adult basic education (grades 0-8) was available in their communities outside of Even Start.

Many project directors say that although numerous educational programs may be available in the community, families often lack knowledge of these programs'

existence or have transportation problems that prevent attendance. This is where Even Start projects' flexibility and ability to "glue" together existing services become most critical.

How Are Families Recruited and Screened?

To qualify for services, a family must have at least one parent who is eligible for adult education under the Adult Education Act or within the state's compulsory school attendance age range and at least one child aged seven or younger. Even Start projects are required to screen applicant families to ensure that they meet these eligibility requirements stated in the Even Start statute. Further, the projects are required to recruit and serve families who are *most in need* of Even Start services in their respective communities. Instead of relying on uniform standards for assessing families' need for services, each Even Start project is expected to develop recruitment and screening approaches that can effectively identify families most in need of the type of services offered by the project.

Exhibit 4.3 shows the percentages of project sites that use various screening criteria to target families with certain characteristics in their recruitment efforts. Some targeting criteria are intended to identify families most in need (e.g., families with incomes below a specified level). Other criteria are related to individual projects' program designs (e.g., families with children already enrolled in early childhood education programs).

In 1995-96 a moderately higher percentage (54 percent) of projects than in 1994-95 (47 percent) used screening criteria beyond those specified by Even Start legislation to target families. In both 1994-95 and 1995-96, parents with no high school diplomas (86 percent and 88 percent) and families with children ages 3 to 5 (74 percent and 72 percent) were targeted by the highest percentage of project sites that used targeted recruiting.

The largest increase in 1995-96 occurred in the percentage of project sites that targeted families with teen parents—from 44 to 54. This increase continued a trend first observed in 1994-95. 1995-96 marked the first full program year since Even Start began that teen parents ineligible for Adult Education Act programs became eligible to participate in Even Start.

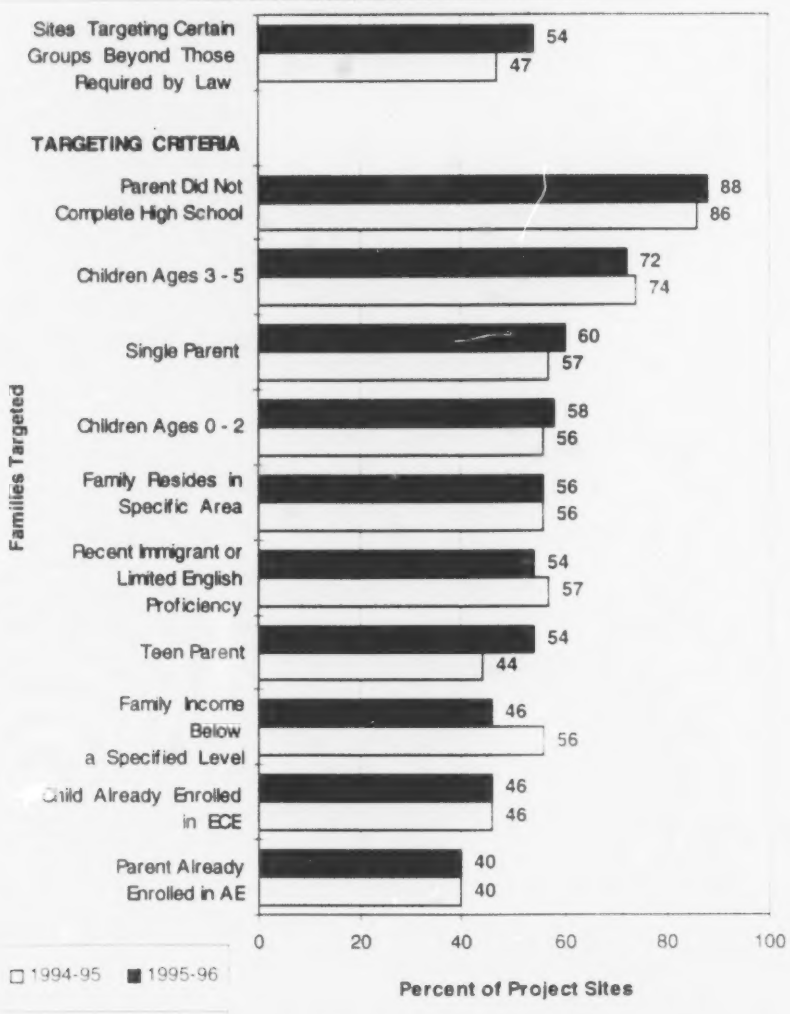
The percentage of sites that used family income as a means to target families decreased ten points in 1995-96. This may reflect an increase in the number of very low-income families applying to Even Start, obviating the need for special targeting efforts.

In addition to the ten criteria listed in Exhibit 4.3, a number of projects used additional criteria to select families most in need.[25] The additional criteria

[25] Exhibit B.4 in Appendix B provides the complete list of additional targeting criteria reported by ten or more projects.

included families in which at least one adult did not have a GED; parents receiving some form of public assistance; parents who were not employed; families that had one or more children with special needs; families with multiple children younger than 8 years; children in specific age categories; and families that were homeless or had a history of domestic violence.

Exhibit 4.3: Criteria for Targeting Services to a Segment of the Eligible Population (1994-95 and 1995-96)



Note: For the percentages of sites that used special targeting strategies (at the top of the exhibit), the 1994-95 percentage is based on 613 project sites and the 1995-96 percentage is based on 635 project sites.

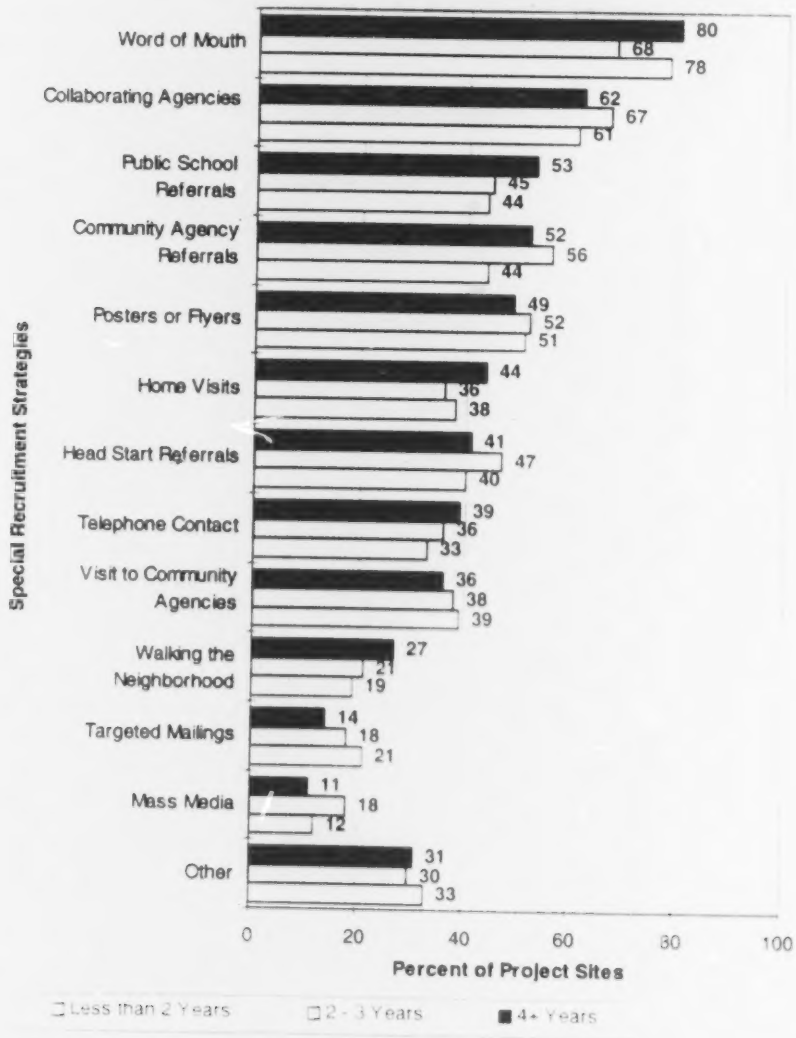
The 1994-95 percentages of the project sites targeting special groups of eligible families are based on 248 project sites that used additional criteria in recruiting families. For 1995-96 the percentages of the project sites targeting special groups of eligible families are based on 332 project sites that used additional criteria in recruiting families.

Exhibit reads: Among Even Start project sites that used additional criteria for recruiting families in 1995-96, 88 percent targeted families with parents who had not completed high school.

RECRUITMENT STRATEGIES

The federal program legislation mandates that projects recruit families most in need of Even Start services. Across all projects, recruitment strategies used "a great deal" by project sites in 1995-96 were similar to those used in 1994-95.

Exhibit 4.4: Percent of Project Sites Using Special Recruitment Strategies "a Great Deal," by Project Age (1995-96)



Note: The percentages are based on the 635 project sites operated by the 563 projects included in evaluation analyses.

Exhibit reads: In 1995-96, 80 percent of mature project sites and 78 percent of first-year sites used word of mouth "a great deal" for recruiting families.

Analysis by project age provided additional insights regarding these recruitment strategies (Exhibit 4.4). Compared to newer project sites, mature project sites (i.e., those with four or more years of experience) employed more labor-intensive, personalized recruitment strategies such as telephone contact, home visits, and "walking the neighborhood." There seemed to be a gradual increase in the use of telephones and walking the neighborhood as projects' experience increased. For example, 33 percent of the first-year sites used telephone contact as a means of recruiting "a great deal," compared to 36 percent of the second/third-year sites and 39 percent of the mature sites.

The mature project sites also used public school referrals more than the younger sites, suggesting that establishing strong linkages with a broad segment of the public school system may require time. Referrals from Head Start, other community agencies, and collaborating agencies were used somewhat more frequently by second/third-year projects than by either the first-year or mature projects. These results suggest that these referral sources also take time to develop. As projects become better established, they may become more proficient in recruiting their targeted families and less dependent on referrals from other agencies.

SCREENING PROCEDURES

Even Start projects need to screen all applicants to assess their family circumstances, educational needs, and potential barriers to participation. All sites must at least verify that families meet the basic mandated eligibility criteria. In fact, 82 percent of the reporting project sites used verification as a screening procedure "a great deal" in 1995-96 (Exhibit 4.5). The use of various screening procedures was similar across 1994-95 and 1995-96.

As displayed in Exhibit 4.5, sites used various other screening mechanisms "a great deal." In addition to verifying eligibility, the screening procedures most frequently "used a great deal" included assessment of adults' basic skills (74 percent of sites) and conducting orientations (67 percent of sites).

Assessment of children's school readiness and language development was "used a great deal" by only 49 percent of the projects. As was noted in 1994-95, this may be due to projects being able to place children into educational levels according to their age, whereas there are no such guidelines for adults, necessitating the use of more formal assessment.

Exhibit 4.5: Percent of Project Sites, by Formal Steps Used "a Great Deal" in Screening Potential Participants (1995-96)

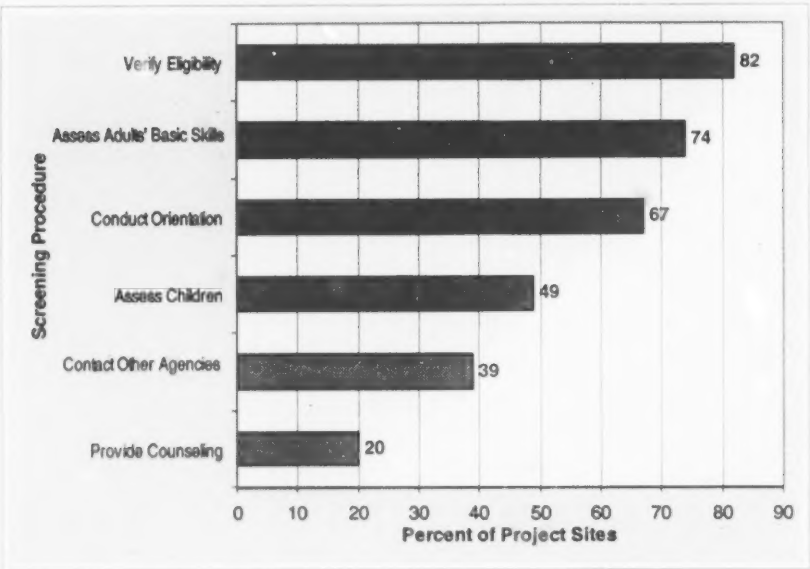


Exhibit reads: In 1995-96, 82 percent of Even Start project sites used verifying eligibility "a great deal" as a screening procedure.

WHAT ARE THE BASIC DESIGNS OF EVEN START EDUCATIONAL SERVICES?

In this section we describe the following features of Even Start educational services and approaches:

- Educational approaches that influenced the design of local Even Start projects; and
- General characteristics of Even Start curricula (locally developed versus commercially acquired, individualized versus standardized, and learner-selected versus instructor-selected).

EDUCATIONAL APPROACHES USED BY LOCAL PROJECTS

An important element of Even Start is its flexibility. While projects must provide the three core services to all participating families, they are encouraged to tailor the delivery of services to their participants.

Even Start directors were provided with a list of sixteen well-known programs and educational approaches and asked to select those that were "very influential" in the design of their projects. Exhibit 4.6 presents the percentages of project

sites that selected each approach as "very influential." (Separate percentages are reported for the three project age groups and for all projects in 1995-96.)

Exhibit 4.6: Percent of Project Sites, by "Very Influential" Sources for the Project Design and by Project Age (1995-96)

Sources for Project Design	Project Age			
	Less than 2 Years	2 - 3 Years	4+ Years	All Projects
Locally developed model	54%	58%	61%	57%
Kenan Family Literacy approach	46%	60%	56%	54%
High/Scope Curriculum	33%	45%	57%	47%
Parents as Teachers (PAT)	44%	45%	48%	46%
Head Start	40%	44%	38%	40%
Systematic Training for Effective Parenting (STEP/PECES)	14%	19%	29%	22%
Bowdoin Method	18%	21%	23%	22%
Parents as Partners in Reading	16%	15%	25%	20%
Parent and Child Education (PACE)	11%	14%	18%	14%
Portage Home Teaching	6%	13%	14%	12%
Home Instruction Program for Preschool Youngsters (HIPPY) Curriculum	2%	10%	11%	9%
AVANCE Family Support and Education Program	6%	7%	5%	6%
Project Home Base	2%	5%	4%	4%
Family and Child Education Program (FACE)	3%	5%	4%	4%
Project AHEAD (Accelerating Home Education and Development)	0%	<1%	1%	1%
Other	30%	37%	34%	34%

Note: The percentages are based on the 635 project sites operated by the 563 projects included in evaluation analyses. For this question, projects could select more than one response (e.g., "locally developed model" and several other approaches that were integrated into the locally developed model).

Exhibit reads: In 1995-96, the Kenan Family Literacy approach was very influential in the program design of 56 percent of mature project sites.

Before discussing the results presented above, we address concerns raised about this question. Experts in the family literacy field point out that the sixteen response choices represent an inconsistent mixture of federal funding streams (e.g., Head Start); specific instructional curricula for adults and/or children (e.g., High/Scope); and approaches for designing a family literacy program (e.g., the Kenan Family Literacy approach) that subsume or are the same as other items included in the 16 response choices. Further, conversations with some project staff revealed that respondents interpreted the question in different ways. Some projects selected certain responses if they "heard about the approach in a training seminar" even though they have not implemented it in their programs. *Given these problems (which will be addressed in future evaluations), the following discussion of the responses to this question should be regarded with considerable caution.*

The 1995-96 results for all projects (the right-most column in Exhibit 4.6) suggest that the majority of project sites developed their own approaches (57 percent). The fairly high percentages across many approaches (the total

exceeding 100 percent) indicate that many of the locally developed approaches were combinations of other listed approaches.

The percentage of projects implementing locally developed models was highest for mature projects. Sixty-one percent of mature sites primarily used locally developed approaches, compared to 58 percent of second/third-year projects, and 54 percent of first-year projects.

However, the greater use of locally developed approaches among mature projects is not accompanied by less reliance on other approaches. In fact, more mature projects than newer projects reported that other approaches (e.g., PACE, Parents as Partners in Reading, STEP/PECES, Bowdoin Method, High/Scope) greatly influenced their curricula. These data suggest that over time projects develop their program designs to best suit the needs of their participants by incorporating relevant elements from other existing approaches.

The large differences across project age groups in the use of some approaches such as STEP/PECES and High/Scope may indicate that these approaches require more time to implement and/or to incorporate into locally developed approaches. It also may indicate that it takes time for projects to become aware of the existence of various approaches.

CHARACTERISTICS OF EVEN START CURRICULA

Projects were asked a series of questions regarding the nature of their instructional curricula. Their responses confirm that there is no single Even Start model. The responses portray Even Start sites as indeed sculpting their programs to accommodate their participants' needs. For instance, in many cases and in most educational areas, sites developed their own curricula or used curricula that were combinations of locally developed and externally acquired materials. Few sites used primarily standardized instruction, opting for at least partially individualized approaches.

Exhibit 4.7 shows the percentages of project sites reporting whether their instructional curricula were mostly locally developed, mostly acquired from external sources, or a combination. For most educational levels, the project sites' responses were fairly evenly spread (in the 30 percent ranges) across the three sources.[26]

[26] In reviewing Exhibits 4.7 through 4.10, it should be noted that individual projects do not necessarily offer services at all educational levels. The types of services offered depend on the design of the particular Even Start project and the needs of the families it serves. For example, projects in which all participants are native English speakers would have no need to provide ESL instruction.

Exhibit 4.7: Main Source of Even Start Educational Curricula: Locally Developed versus Acquired (1995-96)

Educational Area	Number of Sites Reporting	Mostly Locally Developed	Mostly Acquired	Both
Adult Basic Education	593	29%	38%	33%
Adult Secondary Education/GED Preparation	587	19%	54%	27%
English as a Second Language	449	32%	30%	38%
Parenting Education	610	40%	23%	36%
Early Childhood Education	610	35%	29%	36%

Note: The percentages are based on the number of project sites reporting.

Exhibit reads: In 1995-96, 29 percent of 593 reporting project sites used mostly locally developed designs and materials for their adult basic education curricula.

However, two exceptions were reported in the areas of adult secondary education/GED preparation and parenting education. In the former, a majority (54 percent) of project sites mostly used externally acquired programs. Conversely, 40 percent of project sites used an approach to parenting education that was mostly locally developed, and only 23 percent used mostly acquired parenting education curricula.

These results are consistent with the greater local availability of adult education programs, compared to parenting education programs. In fact, adult secondary education and GED preparation were most available in communities, while parenting education was one of the least available programs (refer to Exhibit 4.2).

We also examined whether Even Start instruction was mostly individualized, mostly standardized, or both. Following the trend from 1994-95, the majority of sites reported they used mostly individualized instruction in all educational areas (Exhibit 4.8). Individualized approaches were especially dominant in adult basic education (70 percent). Relatively few project sites reported relying mostly on standardized approaches for any educational component. Parenting education may incorporate somewhat more standardized approaches than other educational components (40 percent of project sites selected "Both"). This may reflect that parenting education is still a developing field and that projects tend to use curricula developed by specialists.

Exhibit 4.8: Nature of Even Start Instruction: Individualized versus Standardized (1995-96)

Educational Area	Number of Sites Reporting	Mostly Individual-ized	Mostly Standard-ized	Both
Adult Basic Education	594	70%	6%	24%
Adult Secondary Education/GED Preparation	591	60%	13%	27%
English as a Second Language	445	56%	9%	36%
Parenting Education	609	51%	9%	40%
Early Childhood Education	608	56%	10%	34%

Note: The percentages are based on the number of project sites reporting.

Exhibit reads: In 1995-96, 70 percent of 594 reporting project sites used mostly individualized instruction in their adult basic education programs.

We also asked projects about the extent to which learning activities involved mostly group activities or students working alone. Many project sites employed a method of instruction that was partly group focused and partly individualized (Exhibit 4.9). In Even Start adult education programs, learners tended to work alone, while group activities were much more common in ESL, parenting and early childhood components. In nearly 60 percent of project sites, parenting education activities involved mostly group activities. These results were generally consistent with the 1994-95 findings.

Exhibit 4.9: Nature of Even Start Instruction: Group versus Individual Focused (1995-96)

Educational Area	Number of Sites Reporting	Mostly Group Activities	Mostly Working Alone	Both
Adult Basic Education	590	16%	31%	53%
Adult Secondary Education/GED Preparation	594	9%	41%	50%
English as a Second Language	444	41%	19%	40%
Parenting Education	610	58%	7%	35%
Early Childhood Education	608	41%	9%	50%

Note: The percentages are based on the number of project sites reporting.

Exhibit reads: In 1995-96, 16 percent of 590 reporting project sites used mostly group activities in their adult basic education programs.

Another question regarding the nature of Even Start instruction involved the "person responsible for planning or choosing instructional activities." Activities in all educational areas mostly were selected by instructors or jointly by the instructors and learners (Exhibit 4.10). Parenting education was the only area that had more learner selected than instructor selected activities. Here, 79 percent of project sites allowed at least some participant-selected activities. Since the core topic of this component focuses on parents and families, it seems reasonable that participant input would be important in shaping instructional activities in this area.

Exhibit 4.10: Nature of Even Start Instruction: Learner versus Instructor Selected Activities (1995-96)

Educational Area	Number of Sites Reporting	Mostly Learner Selected	Mostly Instructor Selected	Both
Adult Basic Education	589	15%	45%	40%
Adult Secondary Education/GED Preparation	589	17%	48%	35%
English as a Second Language	446	13%	46%	41%
Parenting Education	609	31%	21%	48%
Early Childhood Education	607	20%	33%	47%

Note: The percentages are based on the number of project sites reporting.

Exhibit reads: In 1995-96, 15 percent of 589 reporting project sites used mostly learner selected instructional activities in their adult basic education programs.

The four sets of descriptors used to assess the characteristics of Even Start curricula make very general reference to the nature of instructional activities. There are undoubtedly variations among projects that responded similarly to these descriptors. However, comparing across the educational components and levels, the use of externally developed curricula and individualized instruction seemed fairly consistent across levels (Exhibits 4.7 and 4.8). ESL, parenting education, and early childhood education tended to use group activities more than adult education did (Exhibit 4.9); and parenting and early childhood education classes appeared to be more learner-directed than all other educational programs (Exhibit 4.10).

How Much Instructional Service Is Offered in Even Start?

A critical element of any educational program is the service intensity, or the amount of instructional activity provided to learners. While it is difficult to capture the qualitative aspects of Even Start educational activities from nearly 600 projects, the number of instructional hours offered by projects has been tracked since the first year of the national evaluation. Admittedly, the number of hours alone reveals little about the quality of what is taught, how it is taught, and how well it is taught. However, analyses from the previous years have shown positive relationships between "hours offered" and key participation and educational outcomes.

For each instructional area, projects reported the scheduled instructional time offered to a typical participant according to the following breakdown:

- Times per month;
- Hours per month;
- Duration of instruction in months; and
- Hours per month of home-based instruction.

INCREASES SINCE 1992-93

Exhibit 4.11 displays the average hours per year of adult education and parenting education services offered in the last three years.[27, 28] In all components, the contact hours offered increased. The increases from 1994-95 to 1995-96 ranged from fourteen to thirty-seven hours per year (or two to four hours per month) for adult education, depending on educational levels.[29]

The increase in parenting education hours, though smaller than the increase in adult education hours, is nevertheless a sign of continuing growth. In 1995-96, as in previous years, parenting education hours offered were lower than the hours for adult education and early childhood education. However, the average amount of parenting education has risen substantially, from 170 hours per year in 1993-94 to 201 in 1995-96, an increase of two to three hours per month.

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[27] Instructional hours could include services provided directly by Even Start staff and by collaborating agencies. In projects where the three core components are well integrated, a given activity or lesson could serve multiple objectives (e.g., adult education and parenting education). Projects were instructed to double count the same hours for all components to which they applied. This method of reporting captures fully the amount of services provided *for each service area*. However, in projects where core services are well integrated, combining the same instructional hours that are "double counted" for all three components would incorrectly inflate the total hours of services offered to a typical family. Thus, the hours of services offered to a typical family are presented for each service area separately and should not be combined to represent the total hours of services offered to typical families across all service areas.

[28] All averages are based on the projects that reported at least one hour of service in each component. For the national summary analyses reported here, "hours per year" was used as a measure of service intensity since it would account for the widely divergent "hours per month" and "months per year" across all projects.

On average, projects offered services for ten months. However, some program designs are intended to regularly serve seasonal participants (e.g., the nine Migrant Education projects operating in 1995-96). For such projects, the "hours per year" measure could underrepresent service intensity. Recognizing this potential problem, the global measure of "hours per year" was used for the overall descriptions of the Even Start program nationwide.

[29] The yearly comparisons are based on data collected during the three years of current evaluation using the same data collection instrument and instructions. However, findings from the first evaluation (St.Pierre et al., 1995) suggest that the gradual increases date back to the earliest years of the Even Start program.

Exhibit 4.11: Hours of Instructional Services Offered per Year per Participant in Adult and Parenting Education (1993-94, 1994-95, and 1995-96)

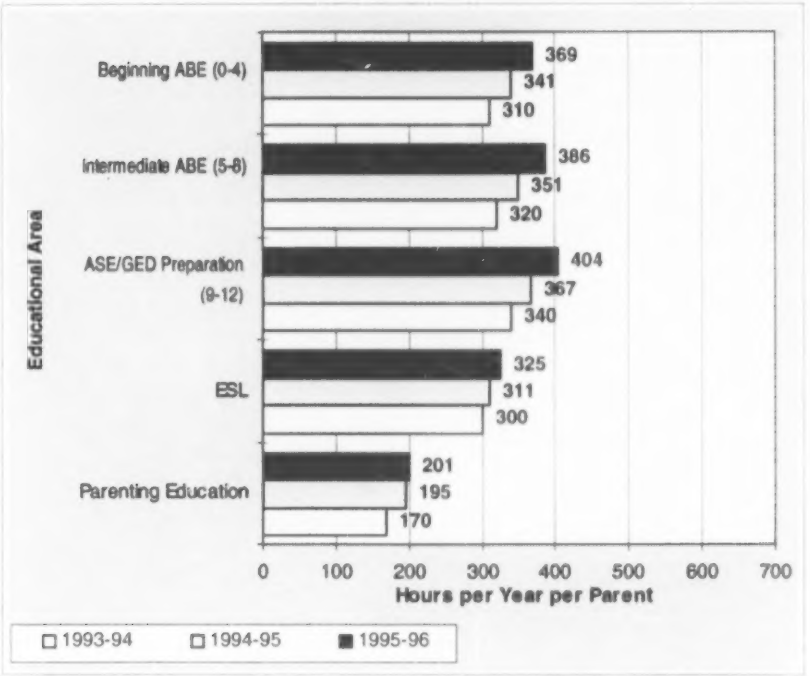


Exhibit reads: In 1995-96, project sites offered an average of 369 hours of instruction in beginning adult basic education.

Exhibit 4.12 displays a substantial expansion in early childhood education components since 1993-94. The hours of educational activities for infants and toddlers under age 3 increased from an average of 350 hours per year in 1994-95 to 391 in 1995-96. This amounts to an increase of approximately three hours per month. The number of project sites offering services to infants and toddlers also increased from 71 percent in 1994-95 to 89 percent in 1995-96 (not shown in the exhibit). Thus, services for infants and toddlers appear to have expanded in intensity as well as availability.

While most of the increases in early childhood education were consistent with those reported for adult education, the dramatic spurt in services for school-age children appeared atypical. One possible explanation for this leap from 225 hours in 1993-94 to 557 in 1994-95 may be the 1995 legislative change that allowed projects to report Title I program services as a part of a project's local cost share. This change may have raised the awareness among local projects that the hours of Title I program activities can be reported as Even Start early childhood education hours. Again, it should be noted that these are the contact hours projects offer to participants, not the actual hours of participation.

Exhibit 4.12: Hours of Instructional Services Offered per Year per Participant in Early Childhood Education (1993-94, 1994-95, and 1995-96)

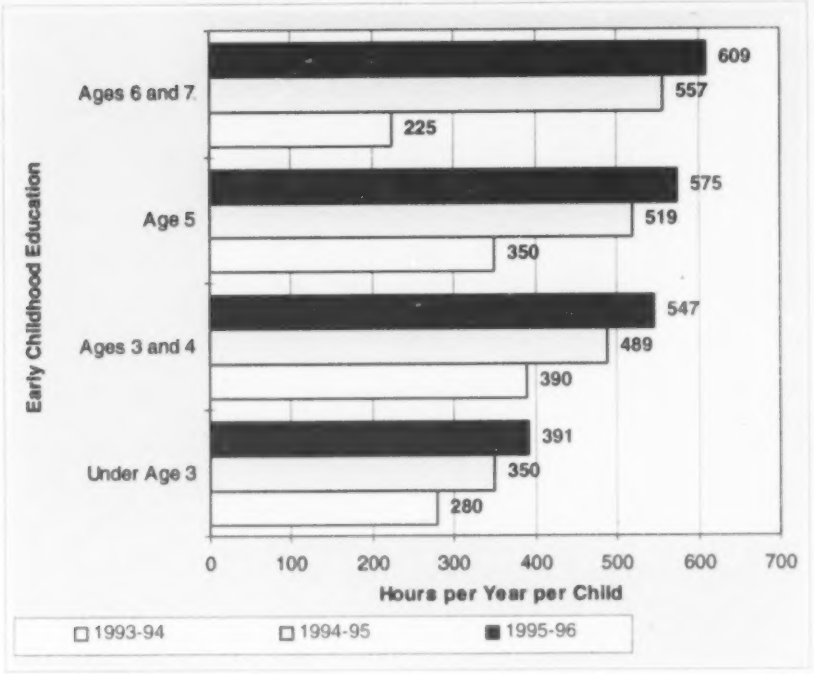


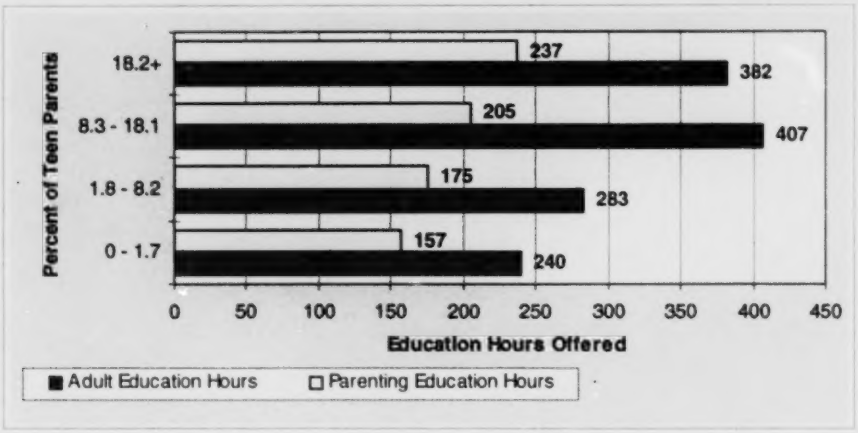
Exhibit reads: In 1995-96, an average of 609 hours per year of early childhood education services were offered to children ages 6 and 7.

LEVELS OF SERVICES OFFERED TO TEEN PARENTS

Increasing enrollment of teen parents was the most notable change in the 1995-96 participant characteristics. To examine the relationship between the percentage of teen parents served and the number of hours offered, projects were divided into quartiles based on the percentage of teen parents in their programs.

We found that project sites with higher percentages of teen parents offered a greater number of hours in all core service areas. Project sites with higher percentages (more than 8.2 percent) of teen parents offered more hours of adult education and parenting education services than the sites with lower percentages of teen parents (Exhibit 4.13).

Exhibit 4.13: Adult and Parenting Education Hours Offered per Year, by Percent of Teen Parents in Project Sites (1995-96)



Note: The analysis was based on 141 project sites with 0-1.7 percent of teen parents; 151 sites with 1.8-8.2 percent teens; 143 sites with 8.3-18.1 percent teens; and 146 sites with 18.2 or more percent of teen parents.

Exhibit reads: In 1995-96, projects with 18.2 percent or more teen parents offered an average of 382 adult education hours per year.

The number of early childhood education hours that projects offered for infants and toddlers also was substantially higher for project sites with higher percentages of teen parents (Exhibit 4.14). It is not possible to determine whether the greater service hours are in reaction to the higher enrollment of teen parents or whether projects with more intensive and extensive services are targeting teen parents more than projects with less intensive services. What the data indicate is that, on average, teen parents are enrolled in projects that offer relatively greater amounts of educational services.

Exhibit 4.14: Early Childhood Education Hours Offered per Year (Infants and Toddlers), by Percent of Teen Parents in Project Sites (1995-96)

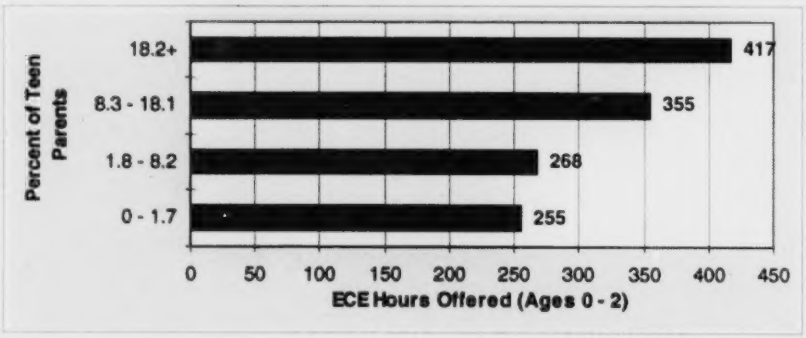


Exhibit reads: In 1995-96, projects that served 18.2 percent or more teen parents offered an average of 417 hours per year of early childhood education.

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SERVICE HOURS OFFERED BY NEW AND MATURE PROJECTS

The 1995-96 evaluation data enabled us to examine the levels of educational services offered by project age. A logical assumption would be that new Even Start projects initially offer little or no instructional services and gradually increase the level in the course of program implementation. We examined this assumption by comparing the average number of contact hours for the first-year, second/third-year, and mature project groups.[30]

As expected, across all components, the mature projects (i.e., those with four or more years of experience) offered substantially more hours of service than the first-year projects (Exhibit 4.15). Across the three levels of adult education, the differences amounted to fifty hours or more. The differences due to experience were most prominent for beginning adult education and ESL, where mature project sites offered sixty-nine and 109 more hours per year than the first-year projects.

Similarly, mature project sites offered more contact hours in parenting education and early childhood education than first-year projects, although the magnitude of difference was not as great as for the adult education services. One atypical finding was that the first-year projects reported ninety-three more hours for children ages 6 and above compared to older projects. This may be due to more new projects reporting Title I service hours as Even Start services, prompted by a recent change in legislation and policy, compared to the older projects, which may be less familiar with the change in reporting rules.

The comparisons between the first-year and mature projects clearly supported the expectation that service intensity increases with program experience. The results for the second/third-year projects may reflect their developmental status. In some educational areas (e.g., the adult basic education) the average hours of services they offer are similar to the first-year projects' averages, while in other areas (e.g., programs for infants and toddlers), the second/third-year projects are more similar to mature projects in service intensity.

[30] The averages are based on projects reporting at least one hour of services offered.

Exhibit 4.15: Average Instructional Hours Offered per Year, by Project Age (1995-96)

Educational Area	Project Age: Less than 2 Years	2 - 3 Years	4+ Years	All Project Sites
Adult Education (AE)				
Beginning AE (0-4)	353	344	422	369
Intermediate AE (5-8)	371	362	438	386
AE/GED Preparation (9-12)	403	389	453	404
ESL	245	327	354	325
Parenting Education				
Parent alone	96	103	120	108
Parent and child together	89	91	113	99
Early Childhood Education				
Under age 3	362	395	415	391
Ages 3 and 4	513	559	576	547
Age 5	584	556	620	575
Ages 6 and up	708	599	615	609

Note: Of all 1995-96 projects, 21 percent were first-year, 42 percent were second/third-year, and 37 percent were mature projects with four or more years of Even Start experience.

Exhibit reads: In 1995-96, the first-year projects offered an average of 353 hours of beginning adult basic education services.

IN WHAT CONTEXTS ARE ADULT EDUCATION SERVICES PROVIDED?

Projects were asked to describe the extent to which their adult education curricula incorporated functional literacy approaches and whether the context of lessons involved life skills, vocational skills, or parenting practices.[31]

The majority of project sites included at least "some" functional literacy in their adult basic education curricula (see the upper half of Exhibit 4.16). This was particularly the case for the intermediate and secondary level classes, for which more than 80 percent of the reporting projects incorporated "some" or "mostly" functional literacy (82 percent and 80 percent, respectively). The ESL and beginning level adult basic education classes included the least amount of functional literacy. In these classes, the necessity of learning the basic English language rules, vocabulary, and academic skills may take precedence over practical applications.

[31] The actual content of adult education curricula differs widely across projects, and it is not feasible to describe them in detail in the national evaluation context. The term *functional literacy* refers to the application of literacy-related skills to real-life situations and practical activities. Examples of functional literacy include reading and writing required in jobs, shopping, using public transportation, filling out tax forms, etc.

Project sites that offered at least "some" functional literacy at the secondary level increased from 74 percent in 1994-95 to 80 percent in 1995-96 (not shown in exhibits). Sites reporting at least "some" functional literacy at the intermediate level also increased slightly since 1994-95, from 78 percent to 82 percent.

Exhibit 4.16: Characteristics of Adult Basic Education Services (1995-96)

	Adult Education Components			
	Beginning (0-4)	Inter-mediate (5-8)	Secondary /GED (9-12)	ESL
Primary Instructional Approach				
Mostly functional literacy	22%	25%	59%	22%
Some functional literacy	20%	57%	21%	21%
Little or no functional literacy	38%	3%	6%	14%
Project sites not reporting	20%	15%	14%	44%
Instructional Context				
Life skills	67%	71%	71%	52%
Parenting	63%	69%	72%	47%
Vocational	37%	52%	67%	35%

Note: The percentages for this table are based on 635 project sites operated by the 563 projects included in the evaluation analyses.

Exhibit reads: In 1995-96, 22 percent of Even Start project sites used mostly functional literacy materials in the beginning adult education programs; 67 percent of project sites incorporated life skills training in the beginning adult education programs.

We also asked project directors to describe their adult basic education services in terms of three broad categories of instructional contexts: life skills, vocational, and parenting (lower half of Exhibit 4.16). Many projects used a combination of instructional contexts across the four education levels.

In general, life skills and parenting were commonly used as contexts for adult education instruction. This is similar to the 1994-95 findings. However, there appeared to be an increasing trend in the use of vocational contexts for adult education curricula. At the secondary education level, the percentage of sites using the vocational materials was 67 percent, similar to 1994-95. However, the sites using vocational materials for the intermediate adult education level rose from 45 percent to 52 percent in 1995-96. This shift may foreshadow the greater emphasis on and need for employment-oriented services in the face of welfare reform and its impacts on Even Start participants.

WHAT ARE THE CONTENTS OF PARENTING EDUCATION?

Parenting education is one of the three required core service components of the Even Start program. Successful parenting education is viewed as a critical element in achieving the Even Start mission. The goals of parenting education go beyond simply getting parents involved in their children's education. Parenting education focuses on increasing parents' knowledge about early

childhood development and effective parenting behaviors and practices so they can contribute actively and constructively to their children's development.

Some activities offered in Even Start parenting education are child focused; some are parent focused; and others focus on parents and children jointly. Projects were asked whether they provided various types of parenting activities to "most families," "some families," "few families," or no families. Exhibits 4.17 and 4.18 summarize the percentages of project sites offering each type of parenting activities to "most families."

Exhibit 4.17: Percent of Project Sites Providing Child-Focused Parenting Education Activities to "Most Families" (1995-96)

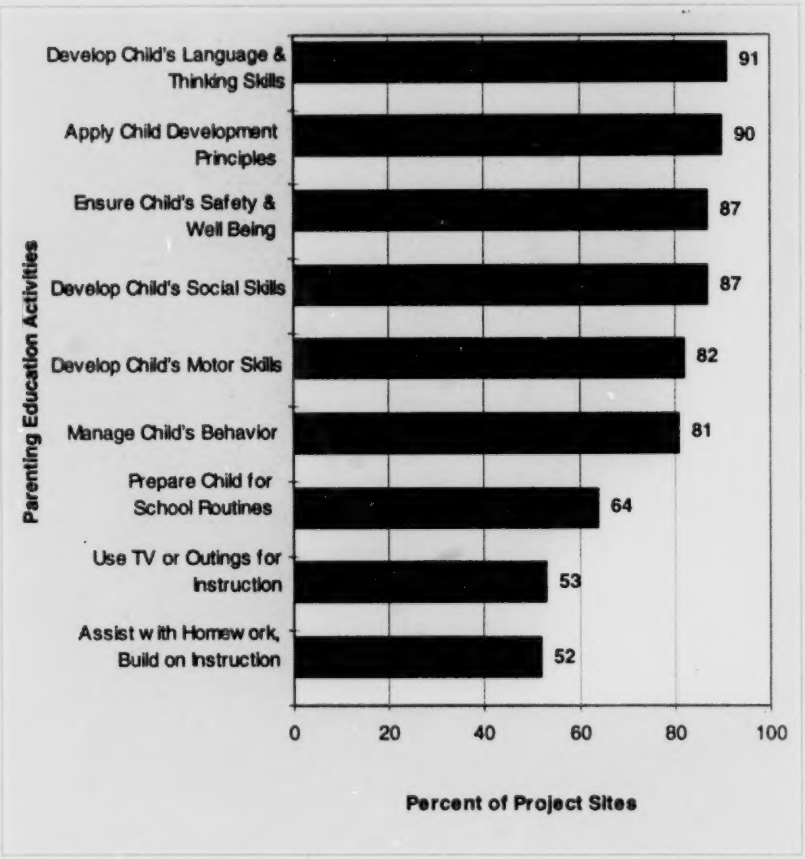

Exhibit reads: In 1995-96, 91 percent of Even Start project sites addressed the application of child development principles to parenting with "most families."

Repeating the 1994-95 findings, most parenting education activities were provided to "most families" by a majority of sites. Among the child-focused parenting activities, the most commonly addressed topics were helping parents to develop a child's language, thinking, social, and motor skills; apply child

development principles in interacting with their children; ensure a child's safety and well-being; and manage children's behavior effectively (Exhibit 4.17).

The common parent-oriented topics were building parents' self-esteem, life skills, good health and nutrition practices, and knowledge of community and social services (Exhibit 4.18). Ninety-four percent of project sites provided parent-child joint literacy activities to "most families."

Exhibit 4.18: Percent of Project Sites Providing Parent or Family-Focused Parenting Education Activities to "Most Families" (1995-96)

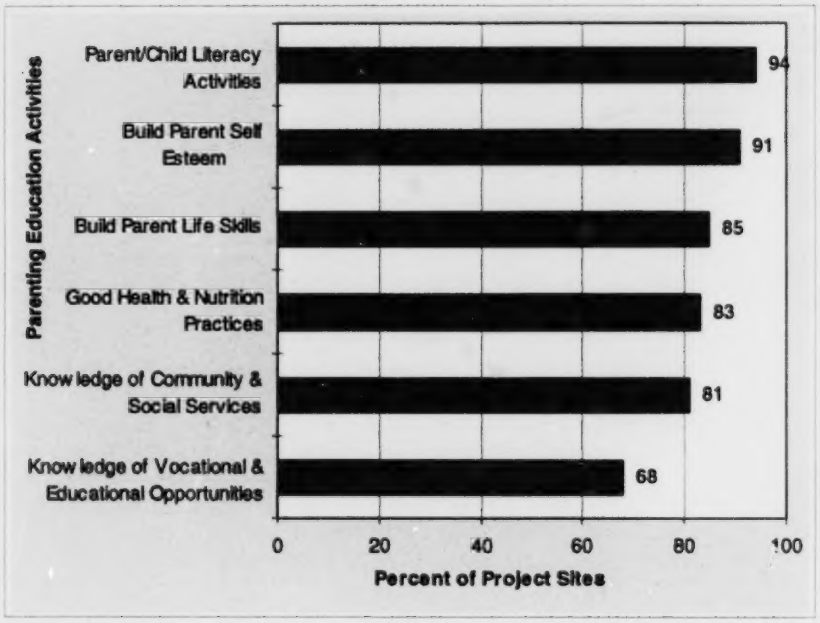

Exhibit reads: In 1995-96, 94 percent of Even Start project sites provided parent-child literacy activities to "most families."

While most project sites employed most of the parenting education activities listed, notably fewer sites reported using four types of activities: helping children with homework; using television or outings for instruction; preparing children for school routines; and increasing parents' knowledge of vocational and educational opportunities. The fact that there were relatively fewer families with school-age children participating in Even Start may explain the fewer

project sites that included school-related activities in parenting education.[32] Discussions of vocational and educational opportunities for parents may be more likely to occur in adult education classes.

Parent-child joint activities play an essential role in parenting education. Projects were asked to describe the extent of parent-child joint activities offered in three instructional contexts: during home visits, in center-based activities, and during special activities such as field trips and meal functions. As shown in Exhibit 4.19, hours offered for parent-child joint activities in a center or classroom increased approximately one hour per month from 1994-95 to 1995-96.

Exhibit 4.19: Hours per Month of Parent-Child Joint Activities Offered, by Setting (1994-95 and 1995-96)

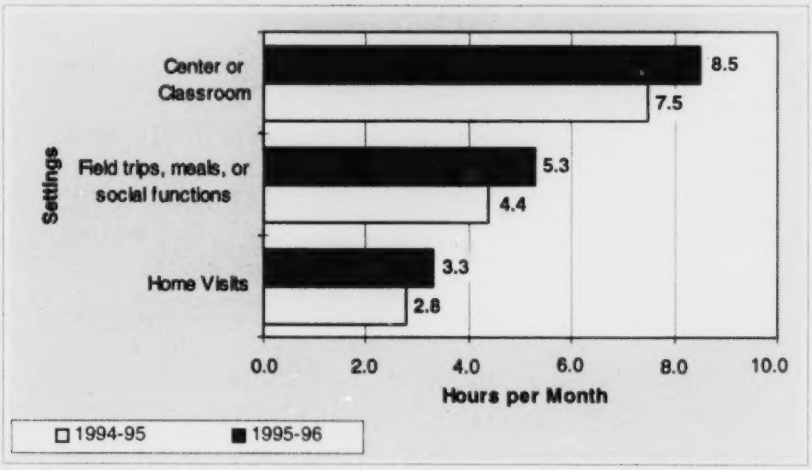

Exhibit reads: In 1995-96, on average, Even Start project sites offered 8.5 hours per month of parent-child joint activities in a center or classroom setting, 5.3 hours per month during special events, and 3.3 hours per month during home visits.

In 1995-96, on average, a typical family was offered 3.3 hours per month of structured parent-child activities through home visits; 8.5 hours in a center-based environment; and 5.3 hours of field trips, meals, or social functions. The range

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[32] School-age children constituted less than 20 percent of all participating children in 1995-96. We explored the possibility that projects serving relatively higher percentages of school-age children may offer more school-related topics in parenting education. We selected the top quartile of project sites based on the percentage of school-age children (27 percent or more) and compared the types of parenting education activities they offered against data from all project sites. Children's homework and building on classroom instructions were addressed as a parenting education topic in 60 percent of project sites that served relatively higher percentages of school-aged children (compared to 52 percent for all project sites). Preparing children for school routines was a parenting education topic in 62 percent of project sites with high percentages of school-age children, essentially the same as the 64 percent across all project sites.

of hours offered in each setting was quite variable, however. Some sites offered up to seventy hours of center-based parent-child joint activities per year, while others offered only a handful of hours in this setting.

Exhibit 4.20 further elaborates on the types of parent-child joint activities provided by project sites.

Exhibit 4.20: Percent of Project Sites Offering Various Parent-Child Activities to "Most Families" (1995-96)

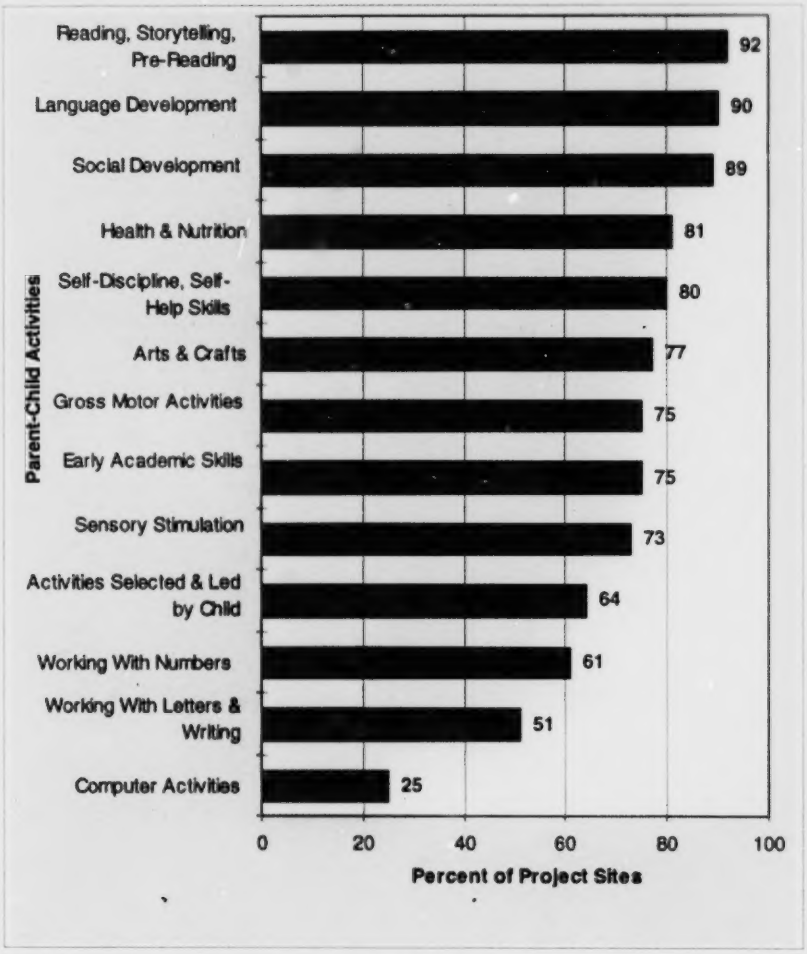

Exhibit reads: In 1995-96, 92 percent of Even Start project sites provided reading, storytelling, and pre-reading to "most families" in parent-child joint activity sessions.

Ninety-two percent of the reporting sites provided reading and storytelling to most families in parent-child joint activity sessions. Other activities offered to most families by 80 percent or more of project sites involved children's language and social development, self-discipline and self-help skills, and health and nutrition practices.

How Are Core Educational Programs Integrated?

The integration of instructional activities across the three core service areas to encourage "value-added" services is one of the philosophical cornerstones of Even Start. Successful integration is expected to result in curricula that are more meaningful and useful to the whole family working as a learning team.

Project sites were asked the extent to which pairs of the core components are provided in the same setting; provided by the same instructors; accomplished through parallel activities; or planned for a whole family together in their program.

In 1995-96 and 1994-95, parenting and adult education services were most frequently integrated through family activities. This method was used by 69 percent of project sites "usually" or "always" (Exhibit 4.21). Seventy-nine percent also reported using this approach to integrate parenting education and early childhood education services "usually" or "always."

Exhibit 4.21: Percent of Project Sites, by Nature of Integration of Even Start Core Services "Always/Usually" (1995-96)

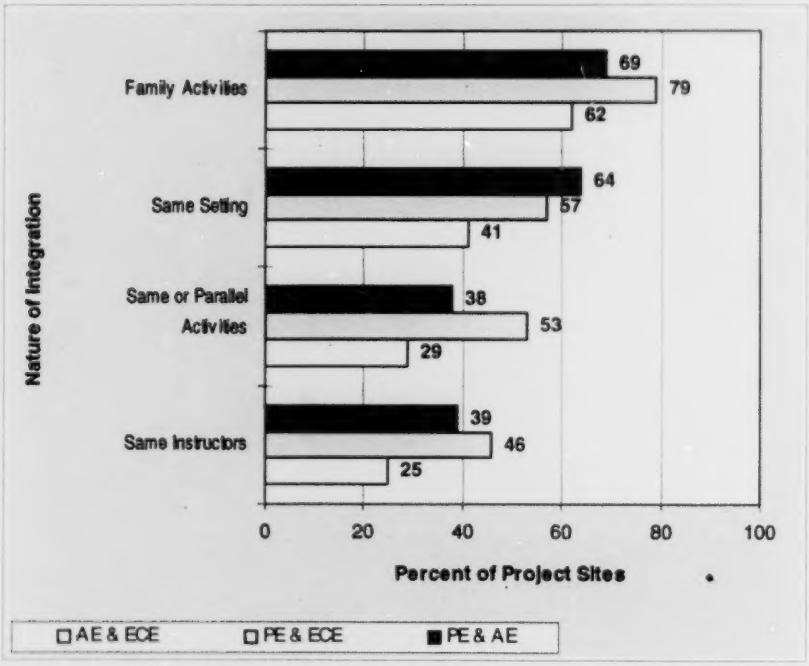

Exhibit reads: In 1995-96, 69 percent of Even Start project sites integrated parenting and adult education curricula by conducting activities involving the whole family.

The second most common approach to integration was to provide services in the same setting. Using this method, 64 percent of project sites integrated parenting and adult education; 57 percent integrated parenting and early childhood education, and 41 percent integrated adult and early childhood education.

Overall, adult education and early childhood education were the least likely to be integrated. This reflects the differences in curriculum contents between, for example, GED preparation classes and educational activities for preschool children.

Projects also were asked to report the hours per month that adult education is integrated with parenting education. The findings in Exhibit 4.22 indicate trends toward greater integration between these two components since 1994-95. The extent of integration (ranging from approximately twelve to fourteen hours per month in 1995-96) was fairly consistent across all levels of adult education.

Exhibit 4.22: Hours per Month That Adult Education Is Combined with Parenting Education (1994-95 and 1995-96)

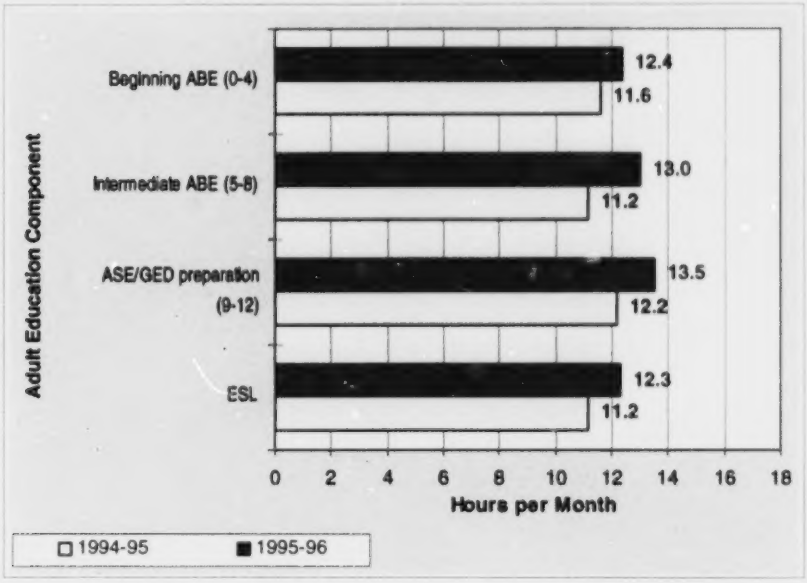

Exhibit reads: In 1995-96, an average of 12.4 hours per month of beginning adult education instruction was integrated with parenting education activities.

WHAT TRANSITIONAL SERVICES ARE PROVIDED TO CHILDREN MOVING TO KINDERGARTEN AND PRIMARY SCHOOL?

Even Start early childhood education programs are intended to provide each child under age 8 with three years of developmentally progressive services. This means that many children go through the transitions from preschool to kindergarten and from kindergarten to primary school while enrolled in Even Start. Projects are expected to prepare children to make these transitions smoothly.

Exhibit 4.23 lists various transitional services for children and the percentages of Even Start projects that implemented each type in 1995-96. The majority (63

percent) of projects reported conducting special programs for children and parents to prepare for the transitions. In about half the projects, Even Start staff coordinated with kindergarten and primary school staff to ensure a smooth transition for children and to facilitate transfer of student information and records (for both preschool- and kindergarten-age children in Even Start).

Exhibit 4.23: Transitional Services Even Start Projects Provide to Children (1995-96)

Transitional Services	Percent of Projects
For Preschool and Kindergarten Children	
Conduct special programs for preschool and/or kindergarten children and parents to facilitate the transition (e.g., special summer program for children, readiness workshops for families)	63%
For Preschool Children	
Facilitate transfer of student information to kindergartens (e.g., student assessment information, student records)	59%
Work with kindergarten staff (e.g., coordinate program activities, conduct joint staff training)	50%
Take parents of preschool children to visit kindergarten; hold parent meetings with Even Start and kindergarten teachers	48%
Take preschool children to visit kindergarten; take kindergarten children to preschools to share experiences about the higher grade	46%
Conduct joint activities for preschool and kindergarten children	45%
For Kindergarten Children	
Work with primary school staff (e.g., coordinate program activities, conduct joint staff training)	51%
Facilitate transfer of student information to primary schools (e.g., student assessment information, student records)	49%
Conduct joint activities for kindergarten and primary school children	35%
Take parents of kindergarten children to visit the primary school; hold parent meetings with Even Start and first-grade teachers	28%
Take kindergarten children to visit the primary school; take children from primary school to kindergarten to share experiences about the higher grade	24%
Conduct extra-year transition classes and/or developmental kindergarten to prepare children for the first grade	19%

Exhibit reads: In 1995-96, 63 percent of Even Start projects conducted special programs to help preschool and/or kindergarten children and their parents to transition to kindergarten or primary schools.

More than 40 percent of projects arranged for preschool children and their parents to visit the kindergarten to be attended and interact with kindergarten children and teachers. This type of activity was somewhat less common for children moving from kindergarten to primary schools—reported by 24 percent to 35 percent of projects. Finally, 19 percent of projects offered special classes to kindergarten children who needed one extra year of development before starting the 1st grade.

How Do Projects Accommodate Participants' Needs?

Two of the key elements required in the Even Start program are serving families most in need and providing support services to assist families to participate in educational components. In addition, given the tremendous diversity among families enrolled in Even Start, flexibility in service delivery and negotiating the many constraints that families experience also are critical elements of the program.

Families' Needs for Support Services

Projects were provided with a list of fourteen categories of support services and asked to report whether "some," "many," or "all" of their families needed them. The most common need was child care; 85 percent of project sites cited that "many" or "all" of their families needed this service (Exhibit 4.24). Additional areas where "many" or "all" families needed support were family support[33] (79 percent), transportation (76 percent), and nutrition assistance (74 percent). The extent of family needs for all services listed was highly similar between 1994-95 and 1995-96.

As expected, many of these needs are interrelated. For instance, families may need meals assistance or help in obtaining adequate health care due to their lack of funds. In the case of many unemployed parents, financial problems might be reduced if they become employed. Thus, directly addressing some key needs for a family could reduce or eliminate additional related needs.

[33] The term *family support* refers to services such as counseling, support groups, and advocacy with other agencies.

Exhibit 4.24: Percent of Project Sites, by Families' Need for Support Services ("All" and "Many" Families) (1995-96)

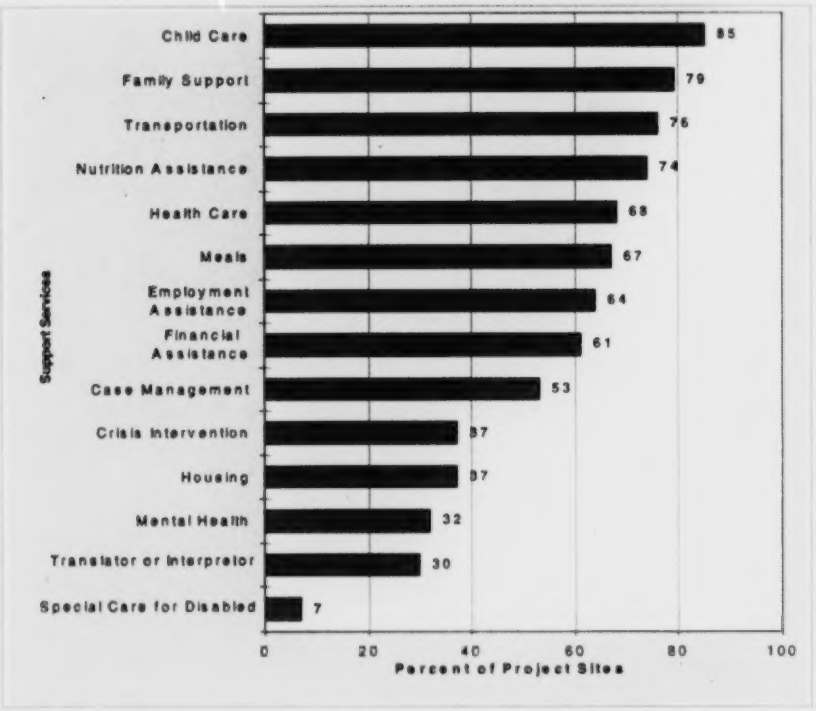

Exhibit reads: In 1995-96, 85 percent of Even Start project sites reported that "all" or "many" of their families needed child care services.

FLEXIBILITY OF SERVICES

The schedules and needs of Even Start parents differ, and projects must accommodate these differences in their service delivery. In many cases this may require providing night or weekend instruction so parents who work full-time can participate. In other cases it may mean providing child care so parents can attend classes.

Exhibit 4.25 shows that child care was offered by most project sites (89 percent), while more than two-thirds provided families both home- and center-based instruction (69 percent). More than half (53 percent) of the Even Start sites accommodated parents' schedules by providing day and evening or weekend classes.

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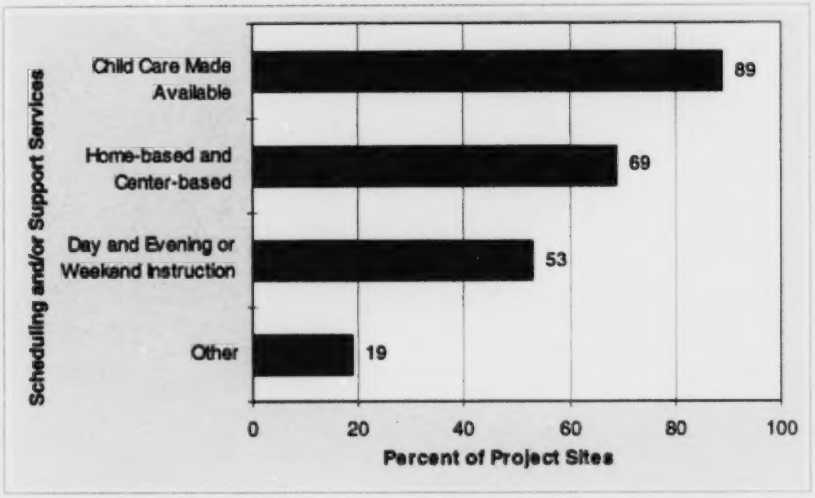
Exhibit 4.25: Flexibility in Scheduling of Even Start Services to Accommodate Adult Participants (1995-96)



Note: Percentages are based on the number of project sites reported by the 563 projects included in the evaluation analyses.

Exhibit reads: In 1995-96, 89 percent of Even Start project sites provided child care services to facilitate parents' participation in Even Start activities.

CHAPTER 5: TO WHAT EXTENT DID EVEN START FAMILIES PARTICIPATE IN THE SERVICES OFFERED?

As reported in the previous chapters, many Even Start families are faced with multiple disadvantages in addition to low literacy and poverty. These include unemployment and under-employment; limited English proficiency; physical handicaps (e.g., cerebral palsy), chronic mental or physical problems (e.g., AIDS, drug and alcohol abuse); and homelessness. Even Start projects implement various strategies to address the diverse educational needs of these families. They also provide support services to enable the families to benefit the most from the educational opportunities. However, retaining families, maintaining participant motivation, and assisting parents to achieve their educational goals are often the most challenging tasks that projects perform.

This chapter examines the extent of participation by families who received Even Start services in 1995-96. For selected analyses, results are compared to the participation rates for 1994-95, especially where the current findings depart from previous patterns. Family-level participation patterns were assessed using the following measures:

- The number of home visits families received during the year;
- The number of hours and type of adult education programs in which parents participated;
- The number of hours of parenting education in which parents participated;
- The number of months in which children participated in early childhood education;
- The frequency of children's absences from early childhood education activities;
- Whether the family participated in all or only some of the three core services;
- The number and types of support services parents and children received;
- Whether the family was retained at the year's end; and
- The reasons reported for families' exiting the program during the program year.

How Many Home Visits Were Made to Families?

Home visits, integral to the Even Start philosophy, constitute critical activities in the overall program design and instructional service delivery. Home visits as a family educational strategy provide multiple advantages:

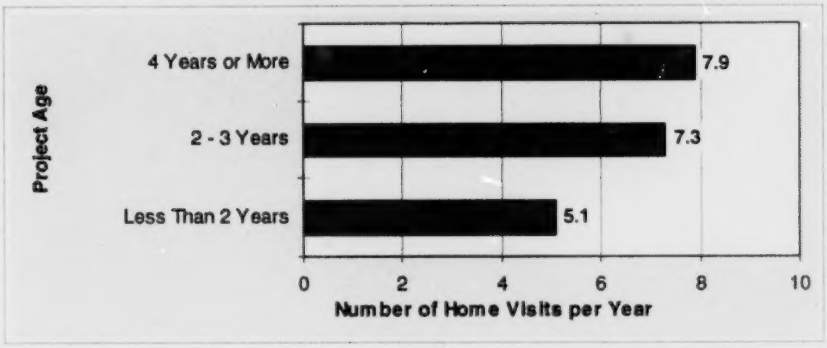
- Linking instructional activities directly to the family setting;
- Providing opportunities for highly individualized, family-oriented instructional activities; and
- Enabling home visitors to identify factors in the home environment that may affect the family's capacity for learning.

These advantages in turn assist the projects in designing educational activities tailored to individual family needs, resources, and abilities. However, the specific number of visits to be conducted is left largely to the projects' discretion. This program component places substantial demands on projects' staffing resources and professional expertise because "home visitors" must tailor their instructional activities to best serve each family's needs. Moreover, families vary according to their receptivity to home-based instruction, a factor that may affect the number of visits that the projects conduct.

On average, Even Start families participated in seven to eight home visits during the 1995-96 program year (7.4 average). Across families, the number of home visits was highly variable; some families received no home visits while others were reported to have received more than 200 during the year (the equivalent of nearly four per week).

The number of home visits also varied depending on project age. Projects with two or more years of Even Start experience provided notably more home visits than the first-year projects. As shown in Exhibit 5.1, the average number of home visits per family in mature projects was almost eight per year; second/third-year projects averaged slightly more than seven; and the first-year projects had an average of about five in 1995-96.

Exhibit 5.1: Average Number of Home Visits per Family per Year, by Project Age (1995-96)

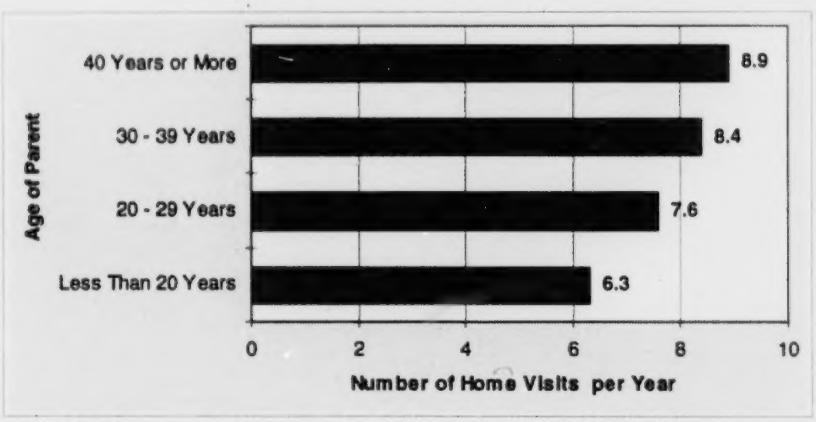


Note: The analysis was based on data from 26,788 families: 3,294 in first-year projects; 9,893 in second/third-year projects; and 13,601 in mature projects.

Exhibit reads: In 1995-96, first-year projects conducted an average of 5.1 home visits per family.

The number of home visits increased with the age of parents. The highest average number of visits, approximately nine, was reported for families with parents ages 40 or older (Exhibit 5.2). The fewest number of visits, an average of about six, was reported for families with teen parents. One possible explanation for this relationship is that older, more mature parents may be more receptive to having Even Start staff visit them at home, while younger parents may be more interested in group activities.

Exhibit 5.2: Average Number of Home Visits per Family per Year, by Parents' Age (1995-96)



Note: The analysis was based on data from 30,972 parents: 3,651 teen parents; 15,717 parents ages 20-29 years; 9,181 parents ages 30-39 years; and 2,423 parents 40 years or older.

Exhibit reads: Families with parents 40 years or older participated in an average of 8.9 home visits in 1995-96.

Consistent with the family system orientation of Even Start, it is expected that, in addition to the parents and children who are enrolled in the program, other

family members may participate in appropriate educational activities during the home visits.

In 17 percent of families, non-Even Start adults took part in the parenting education activities conducted during the home visits. This percentage has remained highly stable across program years. However, in the majority of families (83 percent), home visits were attended only by adults formally enrolled in Even Start.

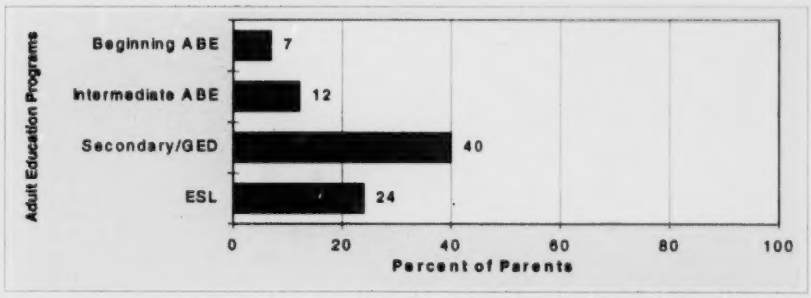
WHAT WAS THE EXTENT OF PARTICIPATION IN ADULT EDUCATION?

One of the key eligibility qualifications for Even Start services is the parent's eligibility for adult education (or age with respect to compulsory school attendance requirements). In addition to raising literacy levels, adult education is intended to better equip parents to support their children's development. This section describes the types of adult education services parents received in 1995-96 and the number of hours they spent in the various types of instructional activities.

TYPES OF ADULT EDUCATION SERVICES RECEIVED

Eighty-five percent of the 33,730 parents for whom projects submitted adult education information participated in some form of adult education. The most prevalent types of adult education were secondary education and GED preparation courses in which 40 percent of Even Start parents enrolled (Exhibit 5.3). The next most common type was English-as-a-second-language (ESL) training in which 24 percent of parents participated. Intermediate adult basic education and beginning adult basic education enrolled 12 percent and 7 percent of parents, respectively. These enrollment percentages are almost identical to those reported for 1994-95.

Exhibit 5.3: Percent of Parents Participating in Even Start Adult Education Programs (1995-96)



Note: The percentages do not add to 100 because parents could participate in more than one program; roughly 14 percent of parents did not participate in adult education.

Exhibit reads: In 1995-96, 7 percent of Even Start parents participated in beginning adult basic education programs.

In general, the type of adult education program parents participated in reflected the level of education they had completed at the time of intake. As shown in Exhibit 5.4, the majority (67 percent) of parents who entered Even Start with a 6th-grade education or less participated in ESL classes; 16 percent enrolled in beginning adult basic education.

Parents educated at the middle- to high-school levels (i.e., 7th to 9th grade and 10th to 12th grade) tended to enroll in adult secondary education and GED classes (46 percent and 56 percent, respectively). As reported in Chapter 3, 43 percent of parents enrolling in 1995-96 had some high school education (i.e., 10th- to 12th-grade levels) at the time of enrollment. For these parents, Even Start's adult education services offer an avenue to complete their secondary education.

Exhibit 5.4: Percent of Parents Participating in Adult Education Programs, by Pre-Even Start Educational Level and ESL Status (1995-96)

	Type of Adult Basic Education (ABE) Program				
	Beginning	Intermediate	Secondary/ GED	ESL	None
Pre-Even Start Educational Experience					
No Schooling - 6th Grade (N=4,510)	16%	8%	8%	67%	11%
7th - 9th Grade (N=8,960)	8%	18%	46%	21%	7%
10th - 12th Grade (N=12,881)	5%	13%	56%	12%	7%
High School Diploma or GED (N=3,046)	4%	7%	24%	18%	11%
Beyond High School Diploma or GED (N=1,564)	2%	5%	18%	42%	10%
ESL (Speak non-English at Home) (N=11,668)	9%	8%	18%	64%	11%

Note. The percentages do not total 100 because a parent could participate in more than one program or in no program. The percentages are based on all parents for whom participation data for 1995-96 were submitted.

Exhibit reads: In 1995-96, 16 percent of parents with 6th-grade or less education participated in beginning ABE; 8 percent each participated in intermediate ABE and secondary/GED; 67 percent participated in ESL; and 11 percent participated in no adult education program.

Five percent of parents participating in 1995-96 had completed some schooling beyond high school prior to enrolling in Even Start. However, most (90 percent) of these parents participated in Even Start core educational services in 1995-96; 42 percent were enrolled in ESL programs provided by Even Start. Of the

remaining 10 percent (or roughly 150 parents), 40 percent had been educated in countries outside of the United States (not shown in exhibit).[34]

The bottom row of Exhibit 5.4 shows the type of adult education programs attended by parents who spoke languages other than English at home (regardless of their educational history). Of the 11,668 parents who spoke languages other than English at home, 64 percent enrolled in ESL classes.

HOURS OF PARTICIPATION IN ADULT EDUCATION

Across all parents, including those who did not participate, the average level of participation in adult education was ninety-six hours for the program year. Participation levels reported for individual parents were highly variable, ranging from none to 1,925 hours for the year. When the non-participants were excluded from analysis, the average increased to approximately 114 hours per year, or eleven to twelve hours per month in a ten-month educational calendar.

The first Even Start national evaluation demonstrated that the extent of parents' participation increases with the maturity of projects (St.Pierre et al., 1995). Grouping projects by length of operation enabled us to analyze the extent of participation in greater detail. As shown in Exhibit 5.5, the average participation hours for parents enrolled in the second/third-year projects was ninety-nine hours, somewhat greater than the average hours for both more- and less-mature projects.[35, 36]

While unexpected, the lower average participation hours reported by the mature projects may reflect in part a greater percentage of families in these projects completing their adult education goals and leaving the program, compared to

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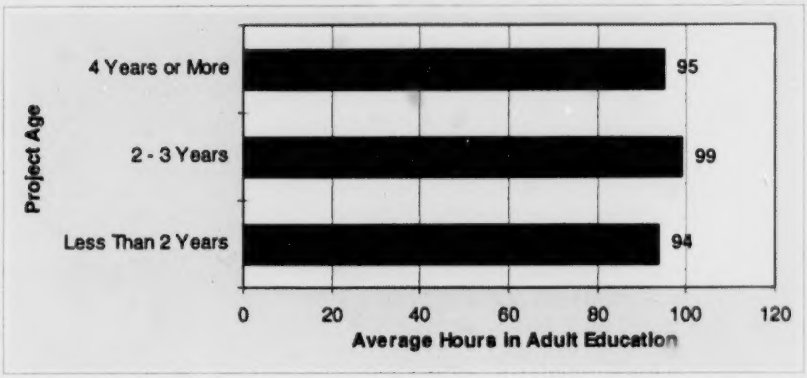
[34] Eighteen percent of parents who had received some postsecondary education before enrolling in Even Start received secondary education or GED preparation services through Even Start. This amounts to less than 1 percent of all 1995-96 participants. A hypothesis that these parents might have received most of their education outside the United States and needed to repeat some secondary education courses in the United States was not supported by further analysis. On the other hand, anecdotal reports by project directors suggest that Even Start parents' educational levels reported for the national evaluation do not necessarily indicate their literacy needs. For example, some high school graduates might have a third-grade reading level when their needs are assessed.

[35] All participation hours reported for adult and parenting education in the remainder of this section include parents who reported zero hours of participation but exclude participants whose data were missing.

[36] As noted in Chapter 3, differences between subgroups of the entire Even Start *population* (e.g., families enrolled in the first-year, second/third-year, and mature projects) need to be examined in terms of how much programmatic importance the observed differences may represent. The judgment of importance depends to a large extent in the use of the information, not on statistical tests of significance.

families in the second/third-year projects. The rates of successful program completion, as measured by the percentage of families who left Even Start for any reason, were 16 percent, 13 percent, and 17 percent for the first-year, second/third-year, and mature projects, respectively.

Exhibit 5.5: Annual Hours of Participation in Adult Education, by Project Age (1995-96)



Note: The analysis was based on data from 29,483 parents: 3,484 in first-year projects; 11,167 in second/third-year projects; and 14,832 in mature projects.

Exhibit reads: In 1995-96, on average, parents in mature projects participated in 95 hours of adult education.

In 1995-96, project sites scheduled an average of 325 to 404 (depending on the educational level) adult education contact hours per participant. Judging from the participation data reported above, many Even Start parents are not fully utilizing the adult education services provided by projects. The vast difference between the adult education services offered and the actual hours of participation highlights the difficulty that many projects face in sustaining parents' commitment to their educational goals.

GROUP DIFFERENCES IN ADULT EDUCATION PARTICIPATION HOURS

The diverse characteristics of the Even Start families systematically affected parents' participation in adult education. Subgroup analyses were performed by parents' age, educational background, and family structure.

Exhibit 5.6 shows that in 1995-96 teen parents were the most active participants in projects' adult education programs (147 hours average), a dramatic increase from the previous program year (ninety-one hours average). This change reflects in large part the rising number of teen parents attending high schools and reporting the high school class hours as Even Start adult education hours. In contrast, participation hours among parents in the three older age groups stayed fairly consistent across the two program years.

Exhibit 5.6: Annual Hours of Participation in Adult Education, by Parents' Age (1994-95 and 1995-96)

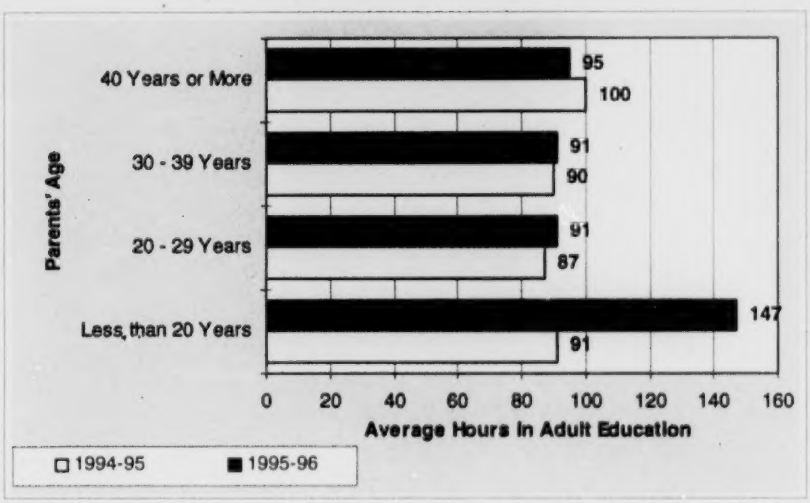


Exhibit reads: In 1995-96, the average hours of participation in adult education for parents 40 years or older was ninety-five hours.

We further examined the extent of adult education participation in relation to parents' age and educational background. Overall, parents who enrolled in the program with a 10th- to 12th-grade education spent the most time in adult education (105 hours average) in 1995-96, closely followed by parents educated at the 7th- to 9th-grade level (Exhibit 5.7, the right-most column).

Exhibit 5.7: Annual Hours of Participation in Adult Education, by Parents' Age and Educational Background (1995-96)

	Parent Age				
Educational Levels	Less than 20 Years	20-29 Years	30-39 Years	40 or More Years	Average Across Age Groups
6th Grade or Less	**85 hours** (86)	**83 hours** (1,641)	91 hours (1,763)	99 hours (717)	**89 hours (4,207)**
7th-9th Grades	122 (1,534)	87 (4,464)	98 (2,035)	109 (511)	**97 (8,544)**
10th-12th Grades	168 (1,846)	95 (6,870)	92 (2,926)	93 (596)	**105 (12,238)**
High School Diploma or GED	181 (77)	69 (1,461)	65 (1,043)	61 (208)	**70 (2,789)**
Postsecondary Education	131 (9)	79 (532)	79 (756)	71 (185)	**78 (1,482)**
Average Across Educational Levels	**147 (3,552)**	**91 (14,968)**	**91 (8,523)**	**95 (2,217)**	**98 (29,260)**

Note: The number of parents in each group is indicated in parentheses.

Exhibit reads: Teen parents who had reached 10th-12th grades at the time of enrollment participated in adult education programs for an average of 168 hours in 1995-96.

This pattern varied somewhat depending on the age of the parent. Among teen parents, those with high school diplomas or GEDs had the highest participation hours (181 hours per year), even though there were only a few parents in this group. For parents ages 30 or older, those who had a 7th- to 9th-grade education participated the most. For all age groups 20 years or above, the participation rates of parents with high school diplomas, GEDs, or some postsecondary education were considerably lower than the national average rate.

We examined the extent of participation in adult education by family structure, expecting that single parents may have more difficulty in juggling their time between educational activities and family responsibilities than two-parent or extended families. While parents living in extended families did log the highest number of adult education hours (122 hours average); single parents had the second highest (112 hours average). Parents in two-parent families averaged the fewest number of adult education hours (eighty-two hours average) (Exhibit 5.8, the right-most column).[37]

Exhibit 5.8: Annual Hours of Participation in Adult Education, by Parents' Age and Family Structure (1995-96)

Family Structure	Parent Age: Less than 20 Years	20-29 Years	30-39 Years	40 or More Years	Average Across Age Groups
Single-parent Family	**131 hours (1,386)**	**107 hours (5,448)**	**109 hours (2,337)**	**122 hours (543)**	**112 hours (9,714)**
Two-parent Family	96 (847)	80 (7,133)	83 (5,157)	82 (1,160)	**82 (14,297)**
Extended Family	200 (1,188)	88 (1,742)	86 (691)	95 (397)	**122 (4,018)**
Average Across Family Structures	**147 (3,421)**	**91 (14,323)**	**91 (8,185)**	**95 (2,100)**	**98 (28,029)**

Note: The number of parents in each group is indicated in parentheses. The number of parents and the average participation hours for each age group are different from those in Exhibit 5.7, due to some records missing data for educational level and family structure.

Exhibit reads: Teen parents living in extended families participated in adult education programs an average of 200 hours in 1995-96.

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[37] A possible explanation for this result concerns program designs and community settings. Specifically, the percentage of two-parent families is higher in rural Even Start projects; rural projects tend to offer home-based services more than do urban projects; and home-based services tend to involve fewer activity hours than center-based services. An alternative explanation involves differences in the motivational dynamics of parents from single-parent and two-parent families. Many single parents, as the sole supporters of their families, may feel the necessity to improve their academic and literacy skills more than parents who have a partner to share the family responsibilities. To further examine why Even Start parents from two-parent families tend to participate less in adult education than other parents requires analysis of information not available in the ESIS.

Further, these results also varied by parent age. Among teen parents, those living in extended families participated more (200 hours annually) than those living in single-parent families (131 hours). However, for parents ages 20 or older, those living in single-parent families participated more (range of 107-122 hours) than those living in extended families (range of eighty-six to ninety-five hours). Parents in two-parent families participated the least across all age groups.

These subgroup analyses lead us to two rather different groups of parents who, on average, are more involved in Even Start adult education relative to others. One group consists of teen parents living in extended families who either reached 10th to 12th grades or finished high school or GED before enrolling in Even Start. The second group consists of single parents at least 40 years old with 7th- to 9th-grade education. Further analyses, using data that are not available, would be needed to fully understand these complex sets of findings.

WHAT WAS THE EXTENT OF PARTICIPATION IN PARENTING EDUCATION?

Reflecting the vital importance of parenting and the home environment in supporting a child's development, the Even Start model includes parenting education as one of its three core components. In 1995-96, 88 percent of parents participated in parenting education, averaging twenty-seven hours for the program year. As with participation in adult education, the number of hours that Even Start parents spent in parenting education services varied widely, from none to more than 1,000 hours per year.[38]

Compared to the common subject areas of adult education, the purpose and content of parenting education may be relatively unfamiliar to many people. This lack of familiarity may explain parents' generally lower levels of participation. Further, differences in family demographics and parents' backgrounds may explain, at least in part, the wide variation in participation among families.

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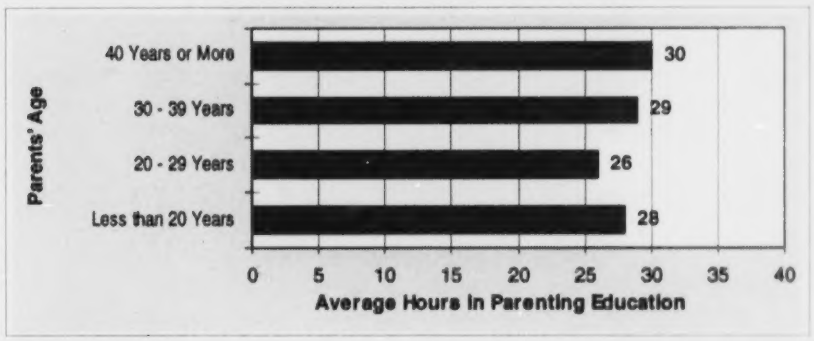
[38] Only two parents were reported to have participated in parenting education for more than 1,000 hours. While this level of participation is much higher than the average, it is possible if a project counts much of parent-child joint activities at home as part of parenting education activities.

Although the results discussed above represent extremely rare cases, this type of finding may raise the question of whether or not an unusually intense level of services should be distributed widely to more participants. Such questions, however, go beyond the realm of this evaluation report, which is designed to summarize information reported by projects. Decisions regarding the most effective use of resources are not made by the evaluation team but rather by the relevant local, state, and federal officials who review the data in light of available resources and participant needs.

As shown in Exhibit 5.9, the average hours of participation in parenting education was highest for parents 40 years and older (thirty hours annually). Parents in the 20- to 29-year age group had a somewhat lower level of participation (twenty-six hours average) than all other age groups. However, the differences of up to four hours over the entire program year may have minimal impact on instructional outcomes.

Exhibit 5.9: Annual Hours of Participation in Parenting Education, by Parents' Age (1995-96)

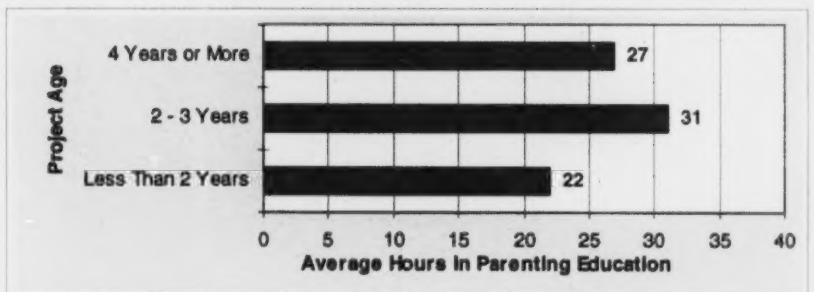


Note: The analysis was based on data from 32,194 parents: 3,712 teen parents; 16,378 parents ages 20-29 years; 9,585 parents ages 30-39 years; and 2,519 parents 40 years or older.

Exhibit reads: Parents who were 40 years of age or older participated in parenting education for an average of 30 hours during 1995-96.

The extent of participation in parenting education differed by project age (Exhibit 5.10). As was the case with adult education, participation in parenting education was greatest among parents enrolled in the second/third-year projects (thirty-one hours average). Parents enrolled in the mature projects with four or more years of experience averaged twenty-seven hours of parenting education participation. Predictably, parents enrolled in first-year projects had the lowest level of participation (twenty-two hours average).

Exhibit 5.10: Annual Hours of Participation in Parenting Education, by Project Age (1995-96)



Note: The analysis was based on data from 29,715 parents: 3,561 parents in first-year projects; 11,202 parents in second/third-year projects; and 14,952 parents in mature projects.

Exhibit reads: In 1995-96, parents in mature projects participated in parenting education for an average of twenty-seven hours.

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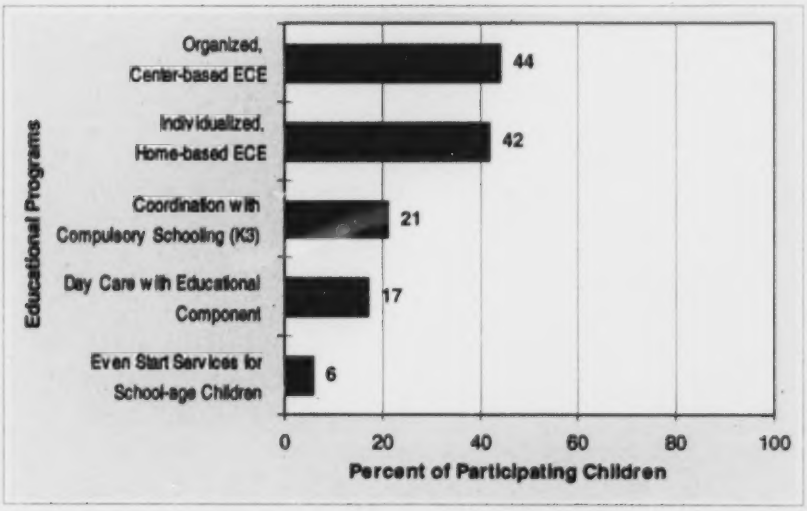
WHAT WAS THE EXTENT OF PARTICIPATION IN EARLY CHILDHOOD EDUCATION?

The third core component of Even Start is early childhood education (ECE). Overall, 95 percent of the 44,758 children for whom we received participation information participated in some form of early childhood education services. As shown in Exhibit 5.11, the most common types of ECE services in which Even Start children participated were organized, center-based programs (44 percent) and individualized, home-based programs (42 percent).

Twenty-one percent of children received Even Start educational services that were coordinated with compulsory education programs for grades K-3 in which they were enrolled. Another 17 percent of children attended day care programs that included educational components and which in many cases may have been provided by collaborating agencies. Finally, 6 percent participated in Even Start educational activities for school-age children outside of their compulsory education curricula.

Exhibit 5.11: Percent of Children Participating in Early Childhood Education Programs (1995-96)

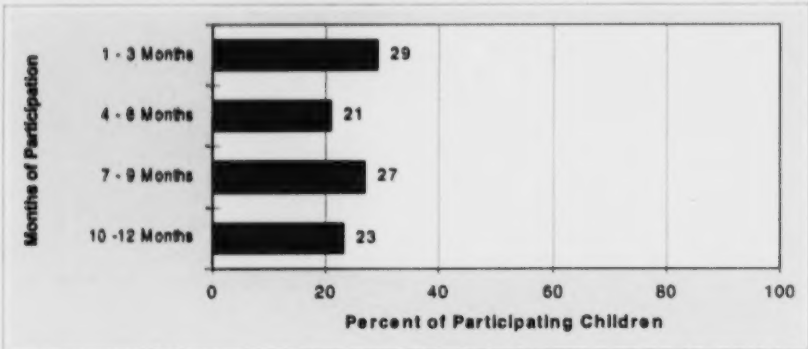


Note: The percentages do not total 100 because some children participated in multiple programs while 5 percent of children did not participate in any early childhood education program.

Exhibit reads: In 1995-96, 44 percent of children received organized center-based educational services.

The extent of children's participation was assessed in terms of the number of months they participated in early childhood education programs (Exhibit 5.12). Nearly one-third of children (29 percent) participated for only one to three months, followed by the children who participated for seven to nine months (27 percent). About one-fourth of children participated for ten to twelve months.

Exhibit 5.12: Percent of Participating Children, by Months of Participation (1995-96)



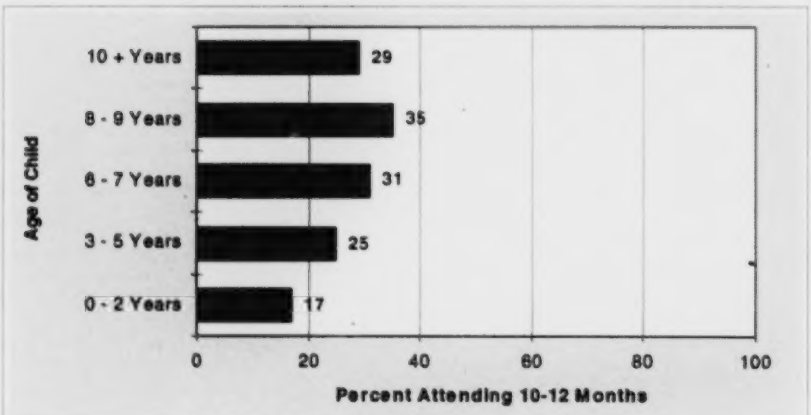
Note: The analysis was based on data from 41,156 children: 11,831 participating for one to three months; 8,467 participating for four to six; 11,226 participating for seven to nine; and 9,632 participating for ten to twelve.

Exhibit reads: In 1995-96, 29 percent of children participated in Even Start for one to three months.

Approximately 60 percent of families participating in 1995-96 enrolled in Even Start during that program year. Thus, many of the children with less than twelve-month participation records may have participated fully since their enrollment.

Focusing more closely on children who participated for ten to twelve months, we found that nearly one-third of school-age children participated for ten to twelve months, while the rates of ten- to twelve-month participation were lower for younger children (Exhibit 5.13).

Exhibit 5.13: Percent of Children Who Attended ECE Services for Ten to Twelve Months, by Age of Child in 1995-96



Note: The analysis was based on data from 39,001 children: 12,485 ages birth through 2; 18,768 ages 3-5; 5,940 ages 6-7; 1,345 ages 8-9; and 463 ages 10 years or older.

Exhibit reads: In 1995-96, 29 percent of participating children 10 years or older participated in Even Start early childhood education for ten to twelve months.

Only 17 percent of infants and toddlers attended Even Start early childhood programs for ten to twelve months. This finding may partly be due to relatively fewer projects offering intensive services to children of this age level, compared to older children (see Exhibit 4.12 in Chapter 4), and to the fact that some infants were born after the program year began.

We also examined the regularity of children's attendance in early childhood education activities. The majority of participating children (76 percent) had solid attendance records. About half (52 percent) were rarely absent, and 24 percent were absent only occasionally (Exhibit 5.14).

Exhibit 5.14: Percent of Participating Children, by Frequency of Absences (1995-96)

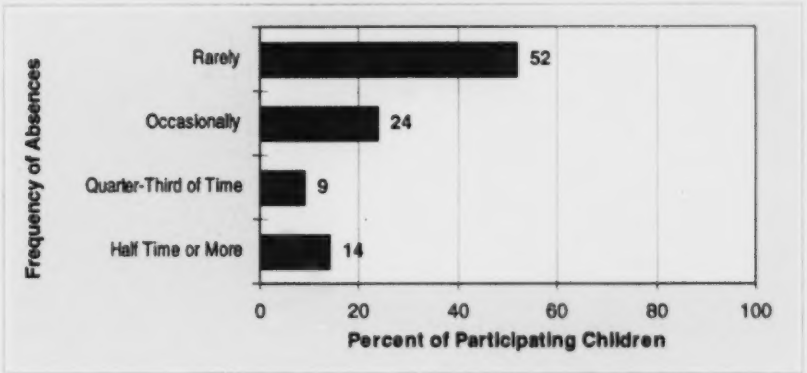


Exhibit reads: 52 percent of children who participated in Even Start during 1995-96 were rarely absent from early childhood education activities.

WHAT PERCENTAGE OF FAMILIES PARTICIPATED IN ALL THREE CORE COMPONENTS?

Families who enroll in Even Start are expected to participate in all three core educational components: adult education, parenting education, and early childhood education. As shown in Exhibit 5.15, 75 percent of families in 1995-96 participated in all three core components. This is 5 percentage points below the previous year.[39] Of the remaining 25 percent of families, 12 percent participated in parenting and/or early childhood education only, and 11 percent

[39] Part of the apparent decline is due to the more precise data coding method used for the 1995-96 data analysis following revisions of the data collection system in 1995. Specifically, in 1995-96 we could differentiate *zero hours of participation* for a parent from missing data. The zero hours were *included* in computing the average participation hours; cases with missing data were excluded. In 1994-95, we could not differentiate zero hours of participation from missing data, and only the records with non-zero hours of participation were included in the average participation hours.

participated in adult education but not in parenting and/or early childhood education.[40]

Two percent of families enrolled in Even Start did not participate in any of the three core program components. These families may have included newly enrolled families who had not begun regular attendance in Even Start educational activities or families that were dropped during the program year due to lack of attendance.

Exhibit 5.15: Extent of Participation in All Three Core Components (1994-95 and 1995-96)

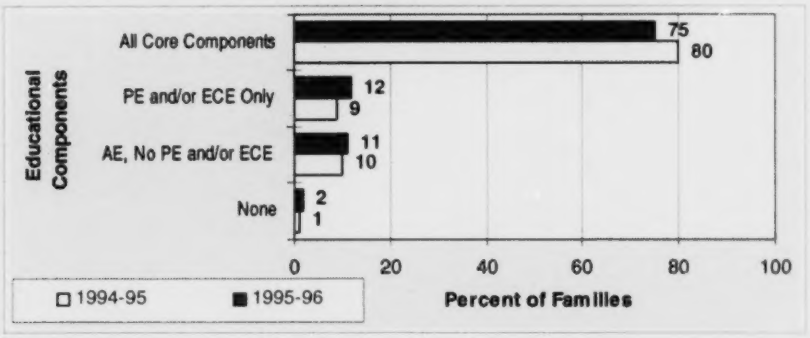
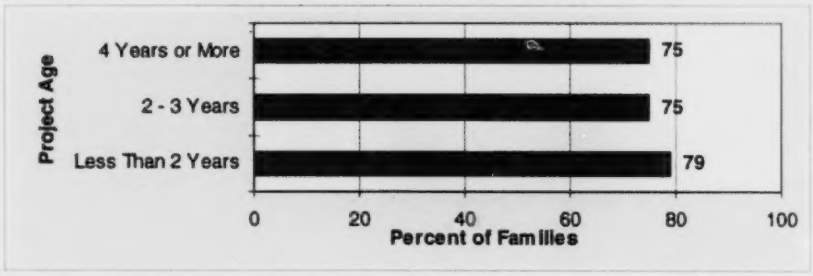


Exhibit reads: In 1995-96, 75 percent of Even Start families participated in all three core components.

The rates of participation in all core services varied somewhat by project age. As shown in Exhibit 5.16, a higher percentage (79 percent) of the families enrolled in first-year projects participated in all three program components, compared to families in older projects (75 percent).

Exhibit 5.16: Percent of Families Participating in All Core Components, by Project Age (1995-96)



Note: The analysis was based on data from 27,896 families: 3,429 in first-year projects; 10,250 in second/third-year projects; and 14,217 in mature projects.

Exhibit reads: In 1995-96, 75 percent of families in mature projects participated in all three core services.

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[40] Two percent of all families enrolled in Even Start in 1995-96 did not participate in early childhood education, even though most of these families (92 percent) had at least one child within the Even Start eligible age range (birth through seven years).

These results may indicate that many families in older projects have completed one or more of their educational goals and are in the process of completing their remaining goals. While 4 percentage points may not represent a significant practical difference in terms of program operations, it is noteworthy that the full participation rate for new projects was *not* substantially lower than the rates of older projects.

Participation in all three core components also varied by parents' age and educational background. As shown in Exhibit 5.17 (bottom row) a higher percentage of teen parents participated in all three core services (81 percent) than older parents, especially those 40 years or older (74 percent).

Exhibit 5.17: Percent of Families Participating in All Three Core Components, by Parents' Age and Educational Background (1995-96)

Educational Levels	Parent Age: Less than 20 Years	20-29 Years	30 to 39 Years	40 or More Years	Average Across Age Groups
6th Grade or Less	**76%** (91)	**79%** (1,745)	**81%** (1,855)	**78%** (762)	**80%** **(4,453)**
7th-9th Grades	81 (1,583)	81 (4,623)	97 (2,111)	76 (544)	**80** **(8,861)**
10th-12th Grades	82 (1,892)	77 (7,154)	75 (3,082)	74 (628)	**77** **(12,756)**
High School Diploma or GED	78 (85)	69 (1,575)	68 (1,139)	62 (224)	**69** **(3,023)**
Postsecondary Education	89 (9)	69 (559)	70 (794)	68 (193)	**70** **(1,555)**
Average Across Educational Levels	**81** **(3,660)**	**78** **(15,656)**	**76** **(8,981)**	**74** **(2,351)**	**75** **(30,648)**

Note: The number of parents in each group is indicated in parentheses.

Exhibit reads: 82 percent of teen parents who had reached 10th-12th grades at the time of enrollment participated in all three core services in 1995-96.

Parents' education levels bore an inverse relationship to participation. As shown in Exhibit 5.17 (the right-most column), families headed by parents with 9th-grade or less education were more likely to participate in all three program components (80 percent) than families with better educated parents. Families headed by parents who had a high school diploma or GED at the time of intake were the least likely to participate in all three components (69 percent).

These differences were particularly noteworthy among parents who were above age 20. Among teen parents, however, those who had not progressed beyond the primary grades in schooling had the lowest rate of participation in all core services (76 percent).

The rates of full participation were consistently higher among the new enrollees, regardless of educational backgrounds (not shown on Exhibit 5.17). On one

hand, this may reflect the families' difficulty in maintaining a consistent level of interest in and commitment to Even Start over time. On the other hand, some families continuing from previous years may have completed parts of their educational goals (e.g., parents passed the GED exam) and were focusing on their remaining goals. Partial support for this explanation is found in the rates of GED attainment while in Even Start. As discussed more fully in Chapter 7, among all 1995-96 participants who entered Even Start without a high school diploma or GED, 9.8 percent completed the GED or were accepted into a college or a university after enrolling in Even Start. In comparison, among the parents who entered Even Start without a high school diploma or GED but did not participate in Even Start adult education services in 1995-96, 22 percent passed GED and/or were accepted into colleges and universities after enrollment.

It should be noted that GED completion was not a goal for 62 percent of parents who entered Even Start without a diploma or GED and who did not participate in adult education. Thus, the percentage of parents who did not participate in adult education because they had achieved their goals may be higher than the percentage estimated based on GED completion rate.

Finally, the rates of participation in all core services were essentially the same for two-parent, single-parent, and extended families.

WHAT WERE THE CHARACTERISTICS OF FAMILIES THAT DID NOT PARTICIPATE IN ALL THREE CORE COMPONENTS?

To gain a clearer picture of families who do not participate fully in Even Start's educational services, we examined the 7,094 families who did not participate in all core components in terms of the parents' age and educational background. We found that teen parents who did not participate in all core components were more likely to participate in adult education (67 percent) than were older parents (46 percent to 47 percent). Conversely, when participation was limited, families headed by parents over 20 years old were more likely to participate in the parenting and/or early childhood education component (53 percent to 54 percent) than were families headed by teen parents (33 percent).

Similar analysis by educational level revealed that 69 percent of families who did not participate in all core components and were headed by parents with the least amount of education at intake (6th grade or less) focused on adult education more than families headed by parents with higher levels of education. Not surprisingly, families with parents who had a high school diploma or GED tended to focus more on parenting and/or early childhood education (86 percent of the families with parents with a high school diploma or GED and 72 percent of the families with parents with some postsecondary education).

WAS SERVICE INTENSITY RELATED TO PARTICIPATION RATES?

Projects vary widely in the content and intensity of educational services they offer to families. The 1994-95 Interim Report cited a strong relationship between the number of contact hours that projects schedule per participant and the hours that parents and children actually participate. We repeated these analyses with the 1995-96 data.

Exhibit 5.18 shows that parents enrolled in projects providing more than 453 hours per year of adult education services participated considerably more (139 hours per year) in adult education services than parents enrolled in projects offering between zero and 240 contact hours.[41] The differences amounted to nearly seventy hours or more of instruction for the program year.

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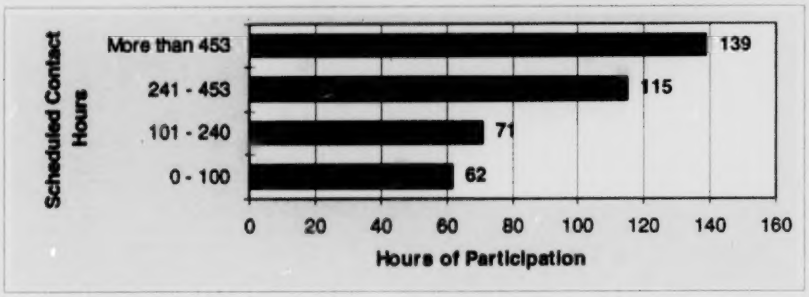
[41] For each project, a measure of scheduled contact hours in adult education was constructed by summing the annual hours offered in the beginning, intermediate, and secondary/GED education levels. We did not include the scheduled hours in ESL because some projects have no need to provide ESL instruction, and including ESL would not account for the varying degrees of need for ESL across projects. This may underrepresent the extent of adult education services for projects that provide mostly ESL training to adult participants.

For the total scheduled contact hours for parenting education, the hours with parents alone and hours with parents and children together were combined. For the total scheduled contact hours for early childhood education, the contact hours for all levels of early childhood education were summed. Next, we divided the projects into four groups based on the quartile ranges on each of the summed contact-hour measures and compared across these four groups on the average hours or months their families participated in adult, parenting, and early childhood education services.

Some projects reported offering zero hours of services in adult, parenting, and/or early childhood education. While some of these data may represent inadvertent skipping in data entry, some of these data were reported by new projects that had not started providing educational services.

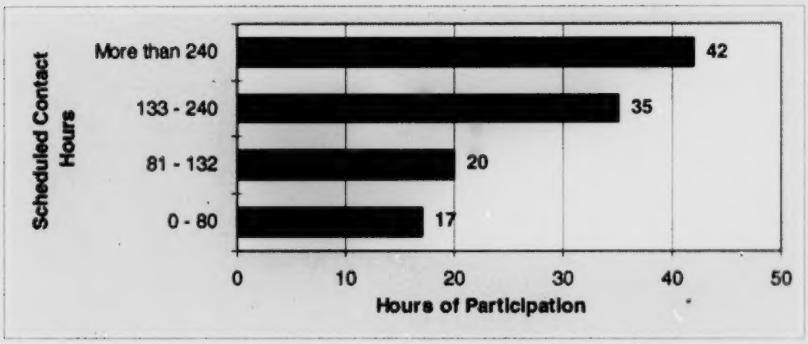
Exhibit 5.18: Average Annual Hours of Participation in Adult Education, by Adult Education Hours Offered by Projects (1995-96)



Note: The analysis was based on data from 515 projects: 118 offering 100 or fewer adult education hours; 143 offering 101-240 hours; 120 offering 241-453 hours; and 134 offering more than 453 hours.

Exhibit reads: The average hours of participation in adult education during 1995-96 were 139 in projects offering more than 453 hours of adult education services in that program year.

Exhibit 5.19: Average Annual Hours of Participation in Parenting Education, by Parenting Education Hours Offered by Projects (1995-96)



Note: The analysis was based on data from 510 projects: 128 offering eighty or fewer parenting education hours during 1995-96; 118 offering eighty-one to 132 parenting education hours; 144 offering 133-240 parenting education hours; and 120 offering more than 240 parenting education hours.

Exhibit reads: The average hours of participation in parenting education during 1995-96 were forty-two in projects offering more than 240 hours of parenting education services in that program year.

Likewise, the hours of parenting education offered by projects was related to the time that parents spent participating in these services (Exhibit 5.19). Specifically, parents in projects offering more than 240 hours of parenting education spent an average of forty-two hours in parenting education, compared to seventeen to twenty hours spent by parents enrolled in the bottom 50 percent of projects. These annual hours translate to a difference of roughly four hours versus two hours of participation per month in a typical ten-month educational program.

Comparable relationships between the amount of service offered and participation hours were not found for early childhood education. This may be

due to the cruder measure used to assess children's participation (in four categories of months), unlike the actual hours of participation reported for parents.

WHAT SUPPORT SERVICES DID PARENTS AND CHILDREN RECEIVE?

As a comprehensive educational program oriented to the improvement of the overall functioning of the entire family, Even Start stipulates the provision of support services that allow parents and children to maximize the educational opportunities available through the program. In Chapter 4, we reported that some support services are needed by most families in most projects. In this section, we present the types of support services that participating families actually received.

The most common support services received by Even Start parents were child care (52 percent); transportation (43 percent); family support (e.g., support groups, 39 percent); and meals (38 percent) (Exhibit 5.20). The services that children most commonly received were child care (48 percent); meals (48 percent); and transportation (43 percent).[42] Fewer families received the types of services that are likely to be provided through referrals and by collaborating agencies, such as health care screening and referrals (26 percent of parents and 28 percent of children) and employment assistance (19 percent of parents).

Finally, 15 percent of parents and 22 percent of children received no support services through Even Start, although they may have received services from social service agencies not associated with Even Start.

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[42] Child care is included among the types of support services parents receive, meaning that child care services for their children allow parents to attend educational services. The apparent difference between the percentages of parents and children receiving this service may be due to different levels of missing data for parents and children. Another possible reason is that many families have multiple children in Even Start. Thus, a parent with one 3-year-old and one 7-year-old may receive child care for the younger child but not necessarily for the older child.

Exhibit 5.20: Percent of Parents and Children Receiving Support Services (1995-96)

Support Services	Parents (N=34,440)	Children (N=45,103)
Child care	52%	48%
Transportation	43%	43%
Family support	39%	N/A
Meals	38%	48%
Social services	36%	N/A
Health care, referral, screening	26%	28%
Employment assistance	19%	N/A
Translator, interpreter	15%	11%
Counseling	N/A	11%
None	15%	22%

Note: "N/A" indicates the types of support services that were assessed only for parents or children but not both.

Exhibit reads: In 1995-96, 52 percent of Even Start parents received assistance with child care.

WHAT WERE THE PATTERNS OF RETENTION?

We examined the patterns of retention in the program through analyses of the following data:

- Whether a family was still participating at the end of the 1995-96 program year; and
- If the family had exited the program during the year, the specific reasons for termination.

Of the 29,607 families for whom the projects provided year-end status, 60 percent were expected to continue into the next program year, while 40 percent had left the program during the year.[43] The retention rate was slightly higher (63 percent) for families that enrolled in 1995-96.

FAMILIES THAT CONTINUED PARTICIPATION OR COMPLETED THE PROGRAM

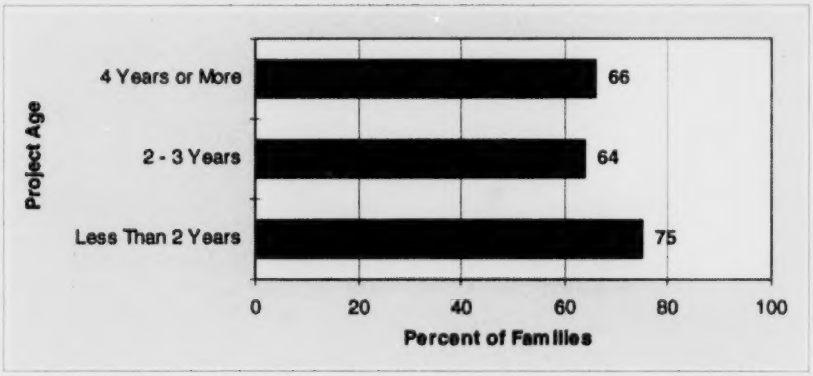
We further examined families that were either continuing in the program, had exited the program after completing their educational goals, or had switched to a

[43] Since some families that project staff expect to continue may not actually continue, the retention rate reported here may be an overestimate. For the final evaluation report, we will investigate the percentage of families who fail to continue participation, contrary to staff expectations.

different educational program and were presumed to be continuing their educational activities.

The rates of retention/completion, as defined above, varied by project age. As shown in Exhibit 5.21, 75 percent of families in first-year projects were retained or successfully completed their goals in 1995-96, compared to 64 percent to 66 percent for older projects. The rates of successful completion were higher among the mature projects—17 percent of *families that left the program,* compared to 15 percent and 13 percent for the first-year and second/third-year projects, respectively. However, the families with successful completion are included in the retention/completion rates. The lower retention/completion rates among the older projects should be examined further in future evaluations.

Exhibit 5.21: Percent of Families Retained or Successfully Completed Program, by Project Age (1995-96)



Note: The analysis was based on data from 26,446 families: 3,259 in first-year projects; 9,722 in second/third-year projects; and 13,465 in mature projects.

Exhibit reads: In 1995-96, 66 percent of families in mature projects were either retained or had successfully completed their goals.

In addition, the rates of retention/completion varied depending on several family characteristics:

- Two-parent families and extended families continued participation or successfully completed the program (69 percent each) more than single-parent families (63 percent). While the percentage differences are small, they are consistent with the expectation that single parents may have fewer resources to support their family, personal, and educational needs compared to parents with partners or extended families.
- Families with parents in their 30s and 40s were retained or had successfully completed the program (71 percent and 74 percent) more than families with parents in their twenties and teens (66 percent and 67 percent, respectively).
- Families headed by parents who had a high school diploma, GED, or some postsecondary education were retained or had completed the program at a higher rate (74 percent) than families where parents had not completed high school (66 percent to 70 percent).

Thus, two-parent or extended families headed by parents 30 years or older who had completed high school or GED were most likely to continue or successfully complete the program. Conversely, single-parent families with parents younger than 30 who had not finished high school were most likely to leave the program without completing their goals.

FAMILIES THAT EXITED THE PROGRAM

Of all 1995-96 participating families, 6 percent left the program after completing their planned educational goals (Exhibit 5.22). Another 6 percent exited the program because parents had found employment that conflicted with continued participation. Fourteen percent, or 4,279 families, left Even Start because of various problems (e.g., poor attendance; family problems and crises preventing participation; and lack of interest) according to the projects' reports.[44]

Exhibit 5.22: Percent of All Families Who Participated in 1995-96, by Reasons for Terminating Participation

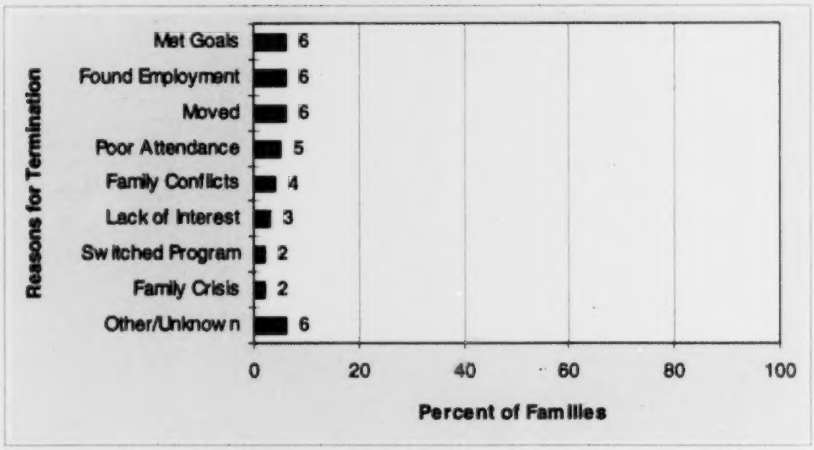
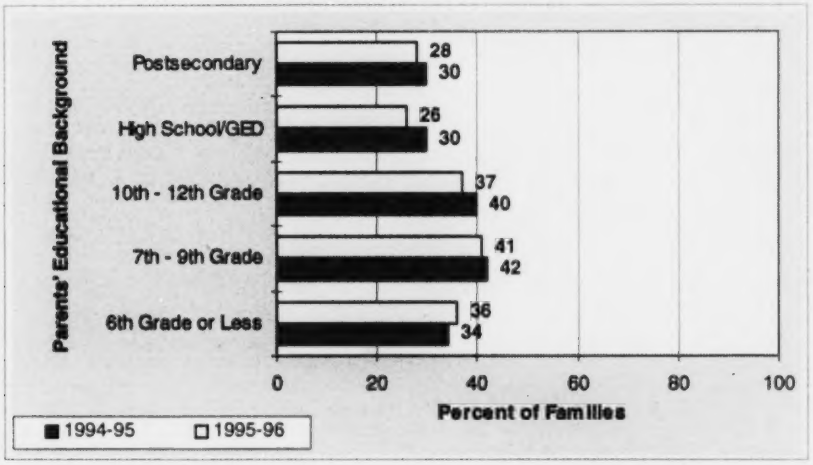


Exhibit reads: Of all families that were in the program during 1995-96, 6 percent exited the program after completing their educational goals.

[44] Some of the "problems" reflected participants' lack of commitment and motivation to fully participate in Even Start while others involved personal and family problems that were not directly related to Even Start but interfered with participation. The ambiguous reasons (e.g., family moved out of the area and families leaving the program because of employment), Other, and Unknown reasons were not included as "problem" reasons, although some of the Others and Unknowns may have been "problems." Six percent, or about 1,700 families, left Even Start for reasons other than the eight listed in Exhibit 5.22. They are listed in Exhibit B.6 in Appendix B. Frequently cited additional reasons for leaving the program included health problems; mother being on maternity leave or the arrival of a new infant; lack of transportation; homelessness; and termination or reduction of Even Start services due to insufficient resources.

The subgroup analyses by parents' educational backgrounds and ages indicated that both of these variables were associated with families' exiting due to various problems. Families with parents at the highest and lowest educational levels were less likely to exit because of problems than parents with intermediate levels of education (Exhibit 5.23). Specifically, for both the 1994-95 and 1995-96 program years, parents educated at the 7th- to 9th-grade levels were most likely to leave Even Start due to various problems (42 percent and 41 percent).

Exhibit 5.23: Percent of Families Exiting Due to Problems, by Parents' Educational Background (1994-95 and 1995-96)

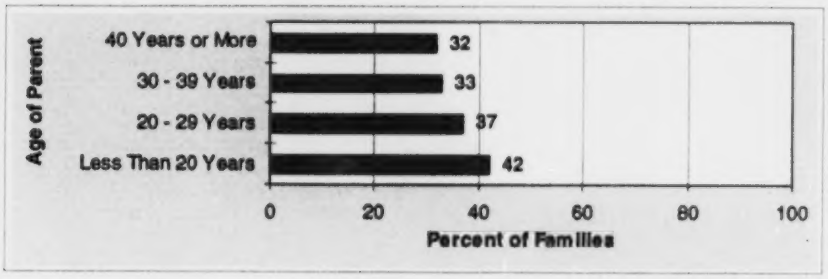


Note: The 1995-96 analysis was based on data from 10,543 families: 1,128 families with parents who had a 6th-grade or lower education; 3,238 with parents who had a 7th- to 9th-grade education; 4,879 with parents who had a 10th- to 12th-grade education; 869 with parents who had a high school diploma or GED; and 429 with parents who had a postsecondary education.

Exhibit reads: Of the families who exited the program during 1995-96, 28 percent of families headed by parents with postsecondary education left for reasons such as lack of interest and poor attendance.

Finally, as parents' age increased, exits from Even Start due to problems declined (Exhibit 5.24). The contrast was the greatest between the teen parents (42 percent) and parents ages 40 and over (32 percent). Although families with teen parents had higher rates of participation in all core services and more hours of adult education than families with older parents, by the year's end the former were more likely to leave the program because of various problems.

Exhibit 5.24: Percent of Families Exiting Due to Problems, by Parents' Age (1995-96)



Note: The analysis was based on data from 11,421 families: 1,473 headed by teen parents; 6,157 headed by parents ages 20-29; 3,106 headed by parents ages 30-39; and 685 headed by parents ages 40 years or older.

Exhibit reads: Of the families who exited the program during 1995-96, 32 percent of families with parents ages 40 years or older left for reasons such as lack of interest and poor attendance.

CHAPTER 6: WHAT SERVICES ARE PROVIDED TO THE NEEDIEST EVEN START FAMILIES?

The fundamental objective of Even Start is to help break the cycle of poverty and illiteracy by providing educational services through a unified family literacy program to low-income families with limited educational experiences. While no particular level of "family need" is specified in the legislation, the law requires Even Start projects to recruit and deliver services to the families "most in need" of Even Start services. The law indicates that families "most in need" are those with a low level of income, a low level of adult literacy or English language proficiency, and "other need-related indicators."

The absence of definitive criteria for families "most in need" creates major challenges in answering the question: "Do projects serve families most in need?" Adding to this definitional problem is the fact that the type and extent of family needs vary in different communities. The appropriate way to answer this question would be to compare the characteristics of Even Start families with all families living in the project's service area. However, the national evaluation is not designed to examine whether Even Start families are those who are most in need of services in their respective communities.[45]

Recognizing these constraints, for the 1994-95 national evaluation report we developed a tentative, data-based working definition of "the neediest Even Start families." The working definition was based on (1) types of economic, educational, and social disadvantages relevant to the Even Start program and (2) distributions of Even Start participants on these characteristics. The analyses using this exploratory "need index" generated new information about the characteristics of Even Start families. In the 1995-96 data analysis, we repeated the same approach, with several refinements to the original working definition, to examine services provided to the neediest families as well as the extent of their participation.[46]

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[45] Economic characteristics of Even Start families as a whole or by state can be compared to similar national or state statistics. However, these comparisons would not capture the diversity among communities that represent Even Start service areas.

[46] The revised working definition reflects the following criteria: (1) receipt of public assistance is assessed by one need indicator; (2) level of English language proficiency is taken into account for parents whose primary language is not English; and (3) presence of a child(ren) with disabilities is another indicator in the family need index. These particular indicators represent a modification of the need index used in earlier analyses and reports. Consequently, findings reported in the 1994-95 Interim report are not directly comparable. Ways to further refine the family need index will be explored in the final report and in the third national evaluation.

In this chapter, we first present the revised working definition of needy families used for this report, then examine the extent of family needs by geographic areas and whether any relationships exist between project characteristics and the prevalence of needy families across projects. The chapter concludes by reporting the participation rates of the neediest families who participated in Even Start in the 1995-96 program year.

WORKING DEFINITION OF NEEDIEST EVEN START FAMILIES

The following seven features of families were used as indicators of family need level:[47]

- **Low income:** Family annual income *below* $12,000. This criterion applied to 71 percent of families participating in 1995-96, at intake. (On average, the Even Start household had five to six persons. The 1996 federal poverty level was $15,911 for a family of four with two children and $12,629 for a family of three with one child).[48]
- **Receiving government assistance:** Families who relied on government assistance as the primary source of income and/or families in which at least one participating adult was receiving government assistance at the time of intake. This criterion applied to 61 percent of families participating in 1995-96, at intake.[49]
- **Limited educational experience:** Families in which at least one participating parent was educated at or below the 9th-grade level; this criterion applied to 47 percent of families participating in 1995-96, at intake.

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[47] Most of the data used to derive the need index represent changeable characteristics of families such as family income, family structure, and parents' English proficiency. These data are collected for this evaluation only at the time of families' initial enrollment in the program. Approximately 40 percent of the 1995-96 participants had enrolled in prior years, and some of their need-related information may well have changed by 1995-96. This is a potential problem in assessing the level of family need for continuing families in this evaluation. Neither increases nor decreases in the level of family need after enrollment are captured by the ESIS. At the same time, the changes would affect the need index analyses only if they *raised* the family above the need threshold (e.g., an increase in income above $12,000/year, a change from a single-parent to a two-parent family, or a change in parents' English proficiency).

[48] Because the ESIS asked for *family* incomes, it is possible that in large households (e.g., extended families), there may have been additional incomes besides the *Even Start family's* reported income.

[49] Receipt of public assistance was used as an indicator of poverty in addition to low family income. To the extent that some eligible families do not receive welfare, due to pride or lack of information, this index may underestimate the level of economic need for some families relative to those who choose to receive public assistance.

- **Limited English language proficiency:** Families in which at least one participating parent spoke a language other than English at home and had difficulty in reading, speaking, and/or understanding English; this criterion applied to 32 percent of families participating in 1995-96, at intake.
- **Single-parent family:** This criterion applied to 38 percent of families participating in 1995-96, at intake.[50]
- **Multiple children:** Families with four or more children ages 15 or younger; this criterion applied to 42 percent of families participating in 1995-96, at intake.
- **Children with disabilities:** Families in which at least one participating child had a disability; this applied to 15 percent of families participating in 1995-96.[51]

We assigned each family a need index value based on the number of the seven characteristics on which the family matched our working definition of "needy."[52] The need index that resulted represents a combination of multiple disadvantages including extreme poverty; limited educational experiences; limited English proficiency; problems associated with single-parent family status; the difficulty of raising multiple children given limited income and earning capacity; and

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[50] Membership in a single-parent family is used as an index of family need separate from family income or the number of people supported by the family income. This index represents difficulties single parents face in parenting and managing all family responsibilities without help from a partner.

[51] In Chapter 3, we stated that 12 percent of *children* participating in 1995-96 were reported to have special needs. The 15 percent reported here refers to *families* in which at least one child participating in Even Start has special needs.

[52] The need index was derived as a family characteristic. Some of the seven need indicators were based on parent- and child-level data. In families with multiple adults and/or children participating in Even Start, the families were classified as having the specific need if at least one parent or child reported the need as defined above.

For parent's limited education and English proficiency, a family was marked as having these needs if at least one participating parent met the working definition criteria. Data on education and English proficiency were collected only for participating parents. Thus, it was not possible to determine whether some families marked as having these needs may include other adults with higher levels of education and English abilities who could reduce the extent of limitations experienced by the families.

If a family had data for four or more, but not all, of the seven indicators, we computed a prorated need index for the family based on available data. If a family was missing data for four or more need indicators, the family was excluded from analyses involving the need index. Of approximately 32,000 families for whom we received at least some data for the 1995-96 evaluation, 4 percent were excluded from the analysis of needy families due to incomplete data.

having a child(ren) with disabilities. Families' need index scores could range from zero to seven, where zero indicated the absence of need *relative to other Even Start families*, and seven indicated the presence of all seven disadvantages.

For the approximately 30,450 families who participated in 1995-96 (and had data for the needy-family analyses), the average need index was 3.1.[53, 54] Thus, on average, Even Start families had about three of the seven disadvantages listed above. While 42 percent of families had four or more disadvantages, 17 percent had five or more, and about 5 percent had no disadvantages based on the working definition criteria. In the remainder of this chapter, families with four or more need indicators (or disadvantages) are referred to as the "very needy families."

Before proceeding with new findings, readers should be reminded of the following: the working definition indicates a family's level of need (or extent of disadvantage) in relation to all other families participating in Even Start. Needy families thus defined have greater, multiple needs/disadvantages than all Even Start families. As shown in Chapter 3, Even Start families as a whole are disadvantaged in many areas of functioning relative to the general population. In applying the working definition of "neediest families" and focusing our analysis on families who are needier than others, we must keep in mind that Even Start projects are, for the most part, recruiting and serving needy families.

For some of the analyses, we grouped projects by the percentage of families they serve who fall into our working definition of the neediest. Again, this approach does not suggest that some projects are failing to serve disadvantaged families or families who qualify as "most in need" in comparison to the community as a whole. As mentioned earlier, the prevalence of needy families is influenced by the community settings and the characteristics of families living in each community—factors that are outside projects' control.

WHAT ARE THE DEMOGRAPHIC CHARACTERISTICS OF THE NEEDIEST EVEN START FAMILIES?

We first analyzed the need index by region and by type of community (urban, rural, mixed). The average need index varied little across regions. However, as shown in Exhibit 6.1, families living in urban areas reported slightly higher levels of need than families living in rural areas, except in the South where the need levels were consistent across urban and rural communities.

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[53] Correlations among the seven need indicators are presented in Exhibit B.7, Appendix B. The correlations were generally low, the highest being .48 between "low income" and "receiving welfare." No correlation was high enough to suggest that any two variables represent essentially the same family characteristic.

[54] The standard deviation of the need index was 1.5.

Exhibit 6.1: Average Need Index, by Region and Type of Community (1995-96)

	Northeast	South	Midwest	West	Total
Rural	2.8 (2287)	3.1 (5781)	2.7 (2309)	2.9 (2108)	2.9 (12485)
Mixed	3.3 (561)	3.1 (3326)	2.9 (672)	2.8 (675)	3.1 (5234)
Urban	3.3 (2347)	3.2 (4541)	3.2 (2766)	3.3 (2769)	3.2 (12423)
Total	3.1 (5195)	3.1 (13648)	3.0 (5747)	3.1 (5552)	3.1 (30142)

Note: The numbers of 1995-96 participating families included in this analysis are indicated in parentheses. The need index ranges from zero to seven.

Exhibit reads: On average, Even Start families in the rural areas of the Northeast scored 2.8 on the need index in 1995-96.

The average need levels were greater among some racial/ethnic groups. As shown in Exhibit 6.2, the African American, Asian, and Hispanic families reported an average of 3.3 needs, compared to 2.8 for American Indian families and 2.6 for Caucasian families. Largely due to the small range of the need index (zero to seven), most average need scores differed only by decimal points. However, some differences (e.g., between 3.3 and 2.6) would translate into many families in one group experiencing one additional type of economic, educational, or social disadvantage compared to most families in the other group.

Exhibit 6.2: Average Need Index by Racial/Ethnic Groups (1995-96 Participants)

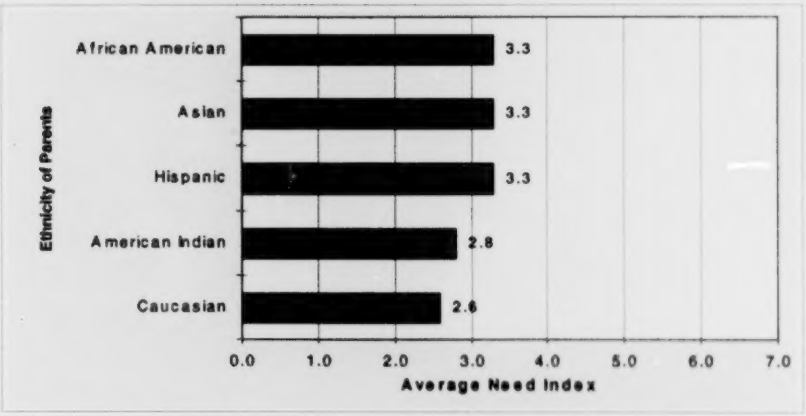

Exhibit reads: In 1995-96, African American, Asian, and Hispanic families in Even Start had an average need index of 3.3.

Analysis of need levels by parent age indicated, on average, that families with parents ages 40 or older had somewhat greater needs (3.2) than families headed by teen parents (2.8).

WHAT PERCENTAGE OF PROJECTS SERVE THE VERY NEEDY EVEN START FAMILIES?

To answer this question, we identified "very needy" families as those who had four or more of the seven need indicators and calculated for each project the percentage of "very needy" families it served. The average percentage of very needy families across all projects in 1995-96 was 41 percent. However, the percentage varied widely across projects. Ten percent of projects had 17 percent or fewer families with four or more needs, while in another 10 percent of projects, 67 percent or more of their caseload had four or more needs. Given this variation in the percentage of very needy families across projects, we examined possible relationships between project characteristics and the proportion of very needy families being served.

In the 1994-95 interim report (based on the 1994-95 participant data), we examined whether projects with high percentages of very needy families strengthen any aspects of their program resources and operations to address the prevalence of very needy families among their participants. We compared projects that served higher percentages of very needy families with projects that served fewer very needy families on a wide range of project characteristics.[55] We found that the number of instructional hours offered by projects varied substantially, depending on the percentage of very needy families served.

Closely replicating the results from the prior year, during 1995-96, projects serving high percentages of very needy families offered more hours of educational services than projects serving low percentages of very needy families. The differences were consistent across every level of educational services (i.e., beginning adult basic education, intermediate adult basic education, secondary education, parenting education, and various levels of early childhood education).

Exhibit 6.3 presents the number of hours per year of adult basic education (averaged across beginning, intermediate, and secondary levels) offered by projects, grouped by the percentages of very needy families.[56] Exhibit 6.4

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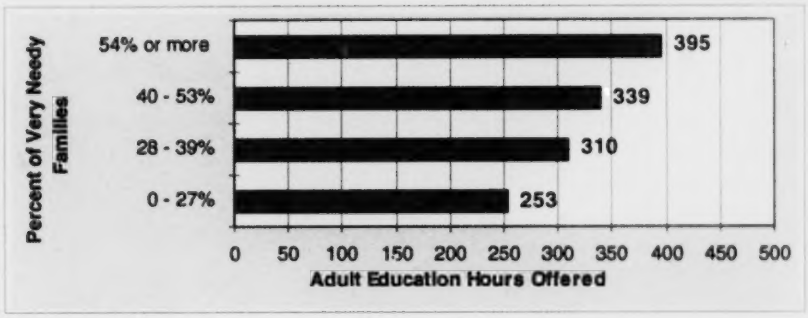
[55] The project characteristics included staffing patterns; focus on family assistance in inservice training; projects' need for technical assistance in areas of providing support services; extent of collaboration with other agencies to maximize available resources and the range of services provided to families; targeting families most in need in recruitment and screening; number of hours of educational services offered to participants; and projects' reports of need for various types of support services among their families.

[56] The projects were divided into four groups according to the quartile ranges on the distribution of "percent of very needy families." Thus, each of the four groups represented approximately one-fourth of all projects. However, due to missing data for the educational hours offered, slightly fewer than 25 percent of project sites were represented in some of the four groups in Exhibits 6.3 through 6.5.

presents the average hours per year of parenting education (both with parent alone and parent and child together), and Exhibit 6.5 shows the hours per year of early childhood education (averaged across all child age levels) by percentage of very needy families.

Projects serving the highest percentages of very needy families offered substantially more (395 hours per year) adult education hours than projects serving the lowest percentages of very needy families (253 hours) (Exhibit 6.3).

Exhibit 6.3: Hours of Adult Education Offered per Year by Project Sites, by Percent of Very Needy Families They Served (1995-96)



Note: The analysis was based on data from 598 project sites: 145 sites in the 0-27 percent group; 156 sites in the 28-39 percent group; 151 sites in the 40-53 percent group; and 146 sites in the 54-or-more percent group.

Exhibit reads: In 1995-96, project sites where 54 percent or more of families were very needy (i.e., had four or more need indicators) offered an average of 395 hours of adult education services.

On average, projects serving the highest percentages of very needy families offered eighty-one hours more parenting education per year than projects with the lowest percentages of very needy families (Exhibit 6.4).

Exhibit 6.4: Hours of Parenting Education Offered per Year by Project Sites, by Percent of Very Needy Families They Served (1995-96)

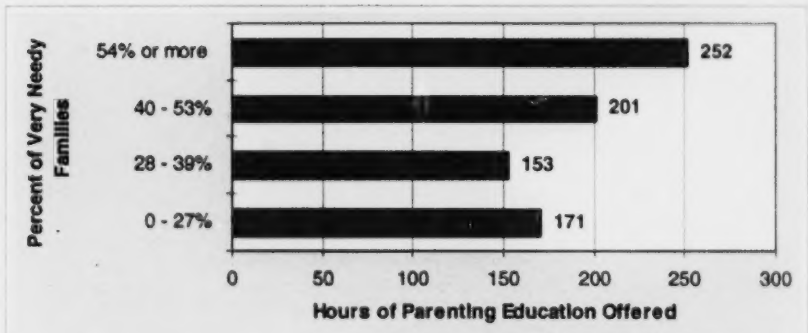


Exhibit reads: In 1995-96, project sites where 54 percent or more families were very needy (i.e., had four or more need indices) offered an average of 252 hours per year of parenting education.

Similarly, projects where more than half the families were very needy offered nearly 130 more hours, on average, of early childhood education per year than projects with the lowest percentages of very needy families (Exhibit 6.5).

Exhibit 6.5: Hours of Early Childhood Education Offered per Year by Project Sites, by Percent of Very Needy Families They Served (1995-96)

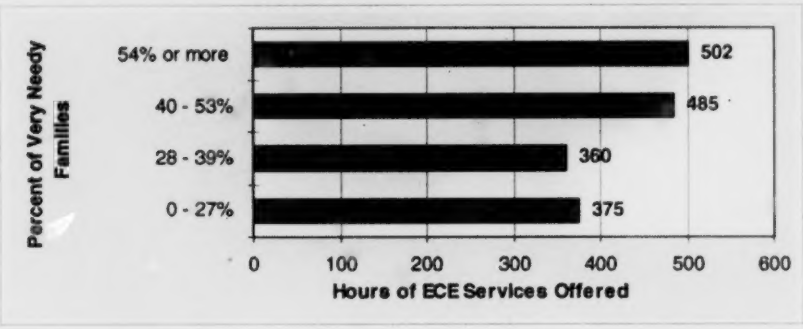


Exhibit reads: In 1995-96, project sites where 54 percent or more families were very needy (i.e., had four or more need indices) offered an average of 502 hours of early childhood education.

Projects with high and low percentages of very needy families did not differ greatly on characteristics other than the number of instructional hours offered. As we noted earlier, most Even Start families are needy in many respects compared to the general population. In addition, all projects are expected to serve as many families as effectively as possible with limited resources. These circumstances common to all projects may diminish the likelihood that characteristics of projects with high percentages of very needy families would differ from the characteristics of other projects.

However, while the projects with high percentages of very needy families did not or could not differ in terms of many aspects of project implementation, they did offer substantially more hours of adult education, parenting education, and early childhood education than projects with lower percentages of very needy families.

To What Extent Did the Very Needy Families Participate in Even Start Services?

Another important question concerning very needy families was the extent of their participation in Even Start services. We repeated the analyses performed in 1994-95 comparing the very needy families with the relatively less needy families in terms of:

- Hours of participation in adult and parenting education and months of participation in early childhood education;
- Likelihood of participating in all three core services;

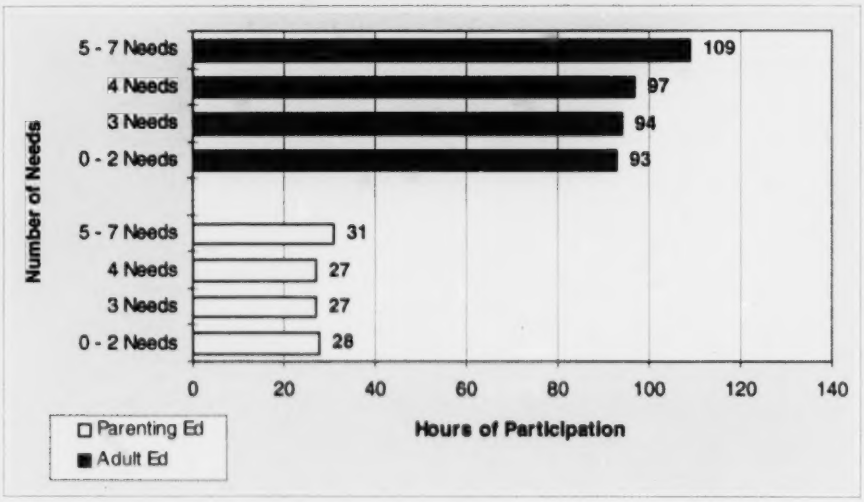
- Rates of retention at year end or successful completion of their educational goals; and
- Rates of unsuccessful termination from the program.

EXTENT OF PARTICIPATION IN CORE SERVICES

Before we examined the extent of participation by very needy families in the 1994-95 evaluation, we expected that the pressures of dealing with multiple disadvantages would tend to interfere with program participation. However, contrary to our expectation, the hours of participation for very needy families matched or surpassed the hours for less needy families.

A similar pattern was repeated in the 1995-96 evaluation. The average hours of participation per year in adult education was fairly consistent (ninety-seven to 101 hours) across families with three or more need indicators (Exhibit 6.6). The only exception was the least needy group, which participated less (eighty-seven hours per year average) than families with more needs.

Exhibit 6.6: Annual Hours of Participation in Adult and Parenting Education, by Family Need Index (1995-96)



Note: The analysis of adult education hours was based on data from 30,989 parents: 10,786 parents in the zero-to-two needs group; 7,637 parents in the three needs group; 7,677 parents in the four needs group, and 4,889 parents in the five-to-seven needs group. The analysis of parenting education hours was based on data from 31,435 parents: 10,913 parents in the zero-to-two needs group; 7,759 parents in the three needs group; 7,799 parents in the four needs group, and 4,899 parents in the five-to-seven needs group.

Exhibit reads: In 1995-96, on average, parents who experienced five to seven needs participated in 100 hours of adult education and thirty-one hours of parenting education.

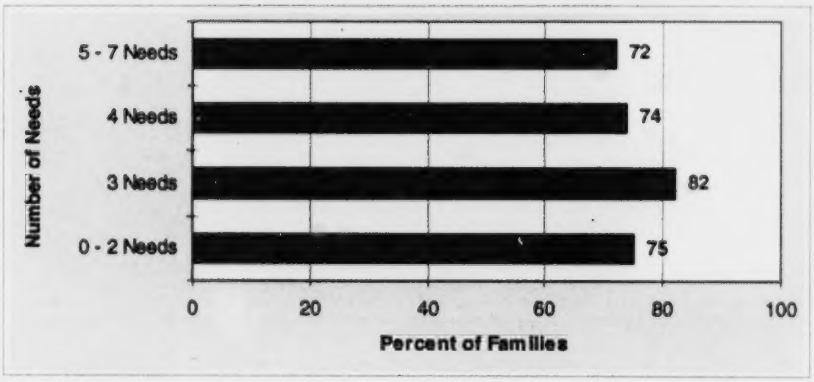
A slightly different pattern was found for parenting education. The average participation hours were relatively close across families with zero to four needs

(twenty-seven to twenty-eight hours per year) (Exhibit 6.6). Families with five or more needs participated an average of thirty-one hours.

The extent of participation in early childhood education was comparable for children from very needy families and their less needy peers. All participated an average of six to seven months (not shown in an exhibit). The frequency of absences from early childhood education activities also was fairly consistent across families regardless of degree of need, typically in the range of occasional absences. Considering that many of the very needy families were headed by single parents with limited English proficiency who had four or more children and very few financial resources, occasional absences could be interpreted as a sign of considerable effort to participate.

Finally, we examined the extent to which the very needy families participated in all three core services during 1995-96. The percentages of families participating in all core services were fairly consistent for very needy families and families with the least number of needs, ranging from 72 percent to 75 percent (Exhibit 6.7). The only exception was the group of families with three needs who participated in all core services at higher rates (82 percent).

Exhibit 6.7: Percent of Families Participating in All Three Core Services, by Family Need Index (1995-96)



Note: The analysis was based on data from 29,430 families: 10,015 families in the zero-to-two needs group; 7,246 families in the three needs group; 7,432 families in the four needs group, and 4,737 families in the five-to-seven needs group.

Exhibit reads: In 1995-96, 72 percent of families with five to seven needs participated in all three core services.

Parents' participation hours for families with four or more needs were comparable or exceeded participation hours for families with fewer needs (Exhibit 6.7). However, about a quarter of very needy families selectively focused their involvement in different educational areas. On the other hand, about a quarter of families with zero to two needs also participated selectively, and these families as a group tended to spend less time in the Even Start activities they attended compared to families with a greater number of needs.

YEAR END PARTICIPATION OUTCOMES

While the very needy families (especially those with five or more needs) participated in Even Start at levels similar to those for the less needy families, their retention/completion rate at year end fell below the less needy families' rates. At the end of the 1995-96 program year, families with zero to two need indicators were more likely to continue or had completed their goals (69 percent) compared to families with four needs (65 percent) and families with five to seven needs (63 percent) (Exhibit 6.8).

Further, the very needy families were somewhat more likely to leave Even Start due to problems such as lack of interest, frequent absences, and family situations and crises preventing participation (Exhibit 6.8). Sixteen percent each of families with five to seven needs and families with four needs left the program due to various problems, while 12 percent of families with zero to two needs terminated unsuccessfully.

Exhibit 6.8: Percent of Families, by Year End Participation Outcomes and by Family Need Index (1995-96)

Number of Needs	Families Continuing or Successfully Completing Their Goals	Families With Unsuccessful Termination
5-7 Needs	63 %	16 %
4 Needs	65 %	16 %
3 Needs	68 %	14 %
0-2 Needs	69 %	12 %

Note: Analysis of five to seven needs was based on data from 4,576 families; analysis of four needs was based on data from 7,121 families; analysis of three needs was based on data from 7,029 families; analysis of zero to two needs was based on data from 9,599 families.

Exhibit reads: In 1995-96, 63 percent of families with five to seven needs were continuing participation at year end or had successfully completed their program goals; 16 percent of families with five to seven needs left Even Start for such reasons as poor attendance and lack of interest.

While it is not feasible within this evaluation to determine whether Even Start projects serve families most in need of their services, we identified families with multiple disadvantages, relative to other Even Start families, and examined the patterns of their participation in the program. Despite the modification to the need index, the 1995-96 findings regarding very needy families closely replicated the results of the 1994-95 evaluation. In both years, projects with high percentages of very needy families provided substantially more hours of educational services. In turn, the highly disadvantaged families spent a comparable or greater amount of time in Even Start educational activities than the less disadvantaged families. However, the participation of very needy families tended to be somewhat more selective, and a higher percentage left the program before completing their goals.

These findings highlight the challenge inherent in the Even Start program—to provide a comprehensive family literacy program for families most in need and to assist them in achieving their educational goals. The data suggest that the very needy families begin the program with a high level of commitment, but

some fail to complete their educational goals in the face of multiple disadvantages. Continued concerted effort and collaboration among service providers and technical assistance providers are needed to address this issue.

CHAPTER 7: WHAT WERE THE EDUCATIONAL AND DEVELOPMENTAL OUTCOMES OF EVEN START PARTICIPANTS?

This chapter begins by summarizing the educational and developmental outcomes of Even Start as found in the current study and, where relevant, in the first national evaluation. As described earlier in this report, the outcomes generally reflect (unless otherwise indicated) data collected for participants in the current evaluation and more specifically for those participants who remained in Even Start long enough to participate in at least two rounds of data collection (e.g., pretest, posttest or followup).[57]

It is important to note that the Sample Study component of the current evaluation depends upon local projects to administer child and adult tests and to submit data on outcome measures. Sample Study staff were initially trained in late summer 1994. Many projects have worked hard to ensure that the annual data collection procedures and submission are carried out smoothly and accurately, yet the quality of the data submitted by local projects has been extremely variable. This reflects staff changes at the project level, among other factors. Consequently, we believe we must interpret our findings with considerable caution because the data may not capture the impact of participation in Even Start as accurately as we had hoped.

Also, as described in Chapter 2, when we contrasted demographic and other characteristics of those families for whom we have both pretest and posttest data to those families with only pretest data, we observed significant differences between these two groups. Specifically, families with both pretest and posttest data are more likely, on average, to be employed, have higher incomes, and speak languages other than English at home. Families with both pretest and posttest data also are less likely, on average, to be headed by single parents. Mothers in the pretest and posttest group have, on average, completed nearly one more year of schooling than mothers with only pretest data. As a result of these systematic differences, the results we describe below reflect a bias in favor of continuing participants who, on average, may have more experience with education and who may well have greater supports in the home. *What this means for our analyses of data from the Sample Study participants is that we may well be overestimating the effects of participation in Even Start. This important caveat should be held in mind when reviewing this chapter and subsequent sections of this report.*

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[57] For the purpose of characterizing baseline status on several outcome measures, we do report pretest or entry scores for participants for whom we may not necessarily have posttest or followup scores.

We focus first on the current study and present a detailed discussion of outcomes for children, followed by outcomes in parenting education, adult education, and other types of progress indicators such as attainment of a GED and improvement in employment status. The last section incorporates data from both evaluations and presents a detailed summary of findings to date on the effects of Even Start on children's cognitive development and parents' basic skills development.

In the current evaluation, information on educational and developmental outcomes for Even Start participants was collected from nearly 2,200 families participating in the fifty-three projects that are continuing to participate in the Sample Study (described in more detail in Chapter 2).[58] Data were collected for the 1994-95 and 1995-96 program years. Across both program years, projects offered, on average, about ten months of service.[59] The findings described in this chapter summarize what we have learned about two different cohorts: families who entered Even Start in the fall of 1994 and families who entered in the fall of 1995 (Exhibit 7.1). For each group of families, we have information on outcome measures collected over a potential period of up to two years of program participation; in general, we have pretest scores, posttest scores (valid only when pre- and posttest administrations are separated by at least three months for the Preschool Inventory and two months for all other measures), and followup scores (also only valid with the same guidelines on test administration dates).[60]

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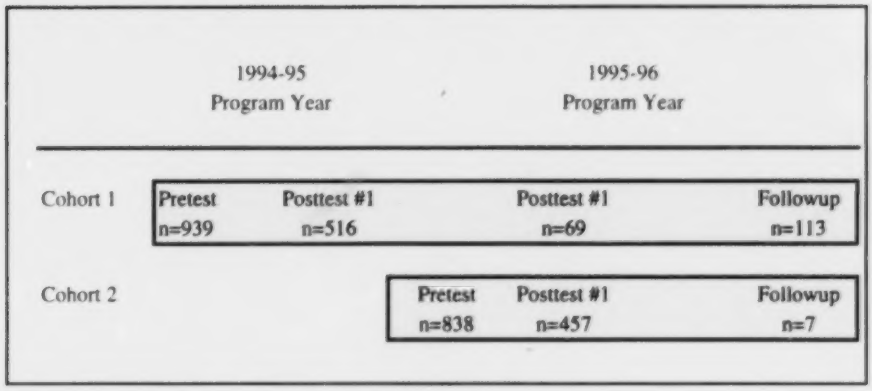
[58] Only fifty-three projects reported that they were still participating in the Sample Study at the end of the 1995-96 program year. The other Sample Study projects were no longer operational or had fulfilled their obligations to the Sample Study by completing the required pretest, posttest, and second posttest assessments on families.

[59] The most recent re-authorization of Even Start requires projects to provide year-round services, with some services occurring during the summer months.

[60] Most of the findings reported in this chapter (and in Chapter 8) are based on pretest and posttest data collected across two program years—1994-95 and 1995-96. While we do have limited posttest #2 data on some measures, there are so few adults or children (generally under 15 percent of those with pretest and posttest #1 scores) that we base the majority of our analyses on simple pretest to posttest #1 differences. We report statistically significant difference scores as appropriate or as indicated throughout this chapter.

Exhibit 7.1: Sample Study Participants and Assessment Schedules



Note: While all families who participated in the Sample Study were administered pretests within a thirty-day window of enrollment, the amount of time between pretests and the first posttest varied considerably. As a result, we included only those families for whom the amount of time between pretest and posttest #1 exceeded at least two months, which is generally held to be a minimally acceptable amount of time. We exercised the same minimum cutoff for the amount of time between posttest #1 and posttest #2.

Exhibit reads: In the first cohort of entering families (those who entered Even Start during the 1994-95 program year), 939 families were pretested, and 516 were posttested (the first posttest) during that same program year. Sixty-nine families completed posttest #1 during the subsequent program year (1995-96), and 113 families were posttested for the second time (followup) during the 1995-96 program year.

WHAT WERE THE CHILD DEVELOPMENT OUTCOMES?

Two measures of children's development were selected for the current evaluation:

- the PreSchool Inventory (PSI); and
- the Preschool Language Scales (PLS-3).

The PSI was used in the first national evaluation of the Even Start program, and the PLS-3 was chosen for this evaluation to replace the Peabody Picture Vocabulary Test-Revised Edition (PPVT-R), which was used in the first evaluation. (For a summary of the content validity of the child development outcome measures as well as the adult outcome measures, please refer to Appendix C.) Each measure is described in more detail below.

THE PRESCHOOL INVENTORY

The PreSchool Inventory (PSI) was developed by Bettye Caldwell as a sixty-four-item inventory of basic concepts important for preschool children to know before entering school (CTB/McGraw-Hill, 1970). A thirty-two-item version has been adapted (Abt Associates Inc., 1991) for use in large-scale evaluations.

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DESCRIPTION OF THE MEASURE

The PSI is an individually administered measure that assesses a range of school readiness skills such as identifying shapes and colors and understanding numerical concepts. The PSI requires fifteen minutes to administer and is appropriate for children between the ages of 3 and 5 years. English and Spanish versions of the test are combined on a single form. Each correct item counts as one point, and a total score is computed. The PSI contains no subscales.

The thirty-two-item version of the PSI has been used in numerous large-scale evaluation studies, including the observation study of Chapter 1 preschool programs (Seppanen et al., 1993); the evaluation of Project Giant Step (Layzer, Goodson, and Layzer, 1990); the National Day Care Study (Bache, 1980); the Head Start Planned Variation study (Walker, Bane, and Bryk, 1973); the National Home Start Evaluation (High/Scope Educational Research Foundation, 1973; 1975); and the Child and Family Resource Program evaluation (Travers et al., 1982).

The PSI was developed to be sensitive to instruction and has shown positive effects of preschool programs in previous research, but it does not have national norms. The psychometric characteristics of the test have been investigated extensively.[61] In the Sample Study, the PSI was administered to children between the ages of 3 and 5 years who were expected to participate in early childhood education. The test was administered to children by program staff or staff they designated (e.g., local evaluator, staff from collaborating agency). Project staff were trained to administer the test in the summer of 1994.

Administration rules for the Sample Study were that for Cohort 1 families entering in the fall of 1994, the test was to be given at entry (in the fall of 1994), again in the spring of 1995 (or at the time of exit from Even Start), and once again in the spring of 1996 (or at exit). Similarly, for families entering in the fall of 1995 (Cohort 2), the test was administered in the fall of 1995, again in the spring of 1996 (or at the time of exit from Even Start), and once again in the spring of 1997 (or at exit). Project staff were asked to administer the PSI as a pretest within thirty days of the start of services to serve as a baseline. Staff were asked to administer posttests with a minimum of three months between pretest and posttest dates. These were the same rules of administration as used in the first national evaluation. Staff recorded the PSI raw score, the test date, and the language of administration.

PRETEST LEVELS ON THE PSI

Across 956 children who entered Even Start in the fall of 1994 or 1995, the mean PSI pretest score was 12.8, with a standard deviation of 7.2 points (Exhibit 7.2).

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[61] The reliability of the measure has been assessed in each of the studies cited above, with Cronbach's alpha ranging from .77 to .87. Test-retest reliability ranged from .67 to .77. In the first Even Start evaluation, the reliability of the PSI, as assessed via Cronbach's alpha, was .86.

The PSI measures school readiness skills, and we expected scores to increase as children age. This indeed was the case: pretest means were 8.5 points for 3-year-olds, 14.7 points for 4-year-olds, and 17.8 points for 5-year-olds. Pretest scores are nearly equivalent for boys and girls in the sample. Children whose parents had completed more education at the time of enrollment generally had higher pretest scores than did those children whose parents had completed less education.[62] Interestingly, the small group of children whose parents had had some postsecondary education had lower pretest scores on average. This may be the case because some of these degrees are from institutions outside the United States. (While it is possible that some parents had had some other postsecondary educational experience such as vocational or trade school, the questions to participants ask only about "some college.")

Exhibit 7.2: PSI Pretest Scores (Raw Score from the Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Age at pretest			
2 yrs, 10 mos - 3 yrs, 11 mos	297	8.5	5.5
4 yrs, 0 mos - 4 yrs, 11 mos	435	14.7	6.3
5 yrs, 0 mos - 5 yrs, 11 mos	119	17.8	6.5
Over 5 yrs, 11 mos	25	19.6	7.6
Gender			
Male	281	11.9	7.3
Female	280	12.9	7.2
Race/Ethnicity			
African American	215	11.6	7.2
Asian	38	9.9	7.2
Hispanic	258	11.3	6.7
American Indian	17	17.4	5.2
Caucasian	260	14.1	7.3
Highest grade attained by target parent[63]			
Grade 0-4	33	11.6	5.9
Grade 5-8	121	11.9	6.8
Grade 9-12	478	12.6	7.3
Diploma or GED	116	13.1	7.1
Some college or college degree	81	11.9	7.8
Language of test administration			
English	674	13.5	7.3
Spanish	191	10.9	6.7
English & Spanish	35	12.2	5.8
Total	**956**	**12.8**	**7.2**

Exhibit reads: PSI pretest data were collected on 297 children ranging in age from 2 years, 10 months to 3 years, 11 months. The mean PSI raw score for these children was 8.5 points, with a standard deviation of 5.5 points.

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[62] We have presented "some college" and "college degree" together because the number of Even Start parents who had had any college (at the time of enrollment) is so small. When we examined the pretest scores for those twenty-three children whose parents had completed college, the average raw pretest score was 14.9, with a standard deviation of 7.4.

[63] For 1995-96, in cases where there were more than one participating parent in the household, "target parent" refers to the parent with the highest level of education. In 1994-95 the "target parent" in such cases was randomly selected.

DEVELOPING AGE NORMS FOR THE PSI

If the PSI had national norms, we could estimate the amount of growth expected on the PSI by comparing the pretest-posttest growth of Even Start children with the growth of children nationally. However, no such norms exist for the PSI, and, even if they did, they probably would not be based on a sample of children that adequately represents the Even Start population.

Fortunately, the pretest data collected from the first national Even Start evaluation afforded the opportunity to develop age norms for the PSI *based on data collected* on Even Start children. By definition, the resulting norms are directly applicable to the Even Start population. In brief, the methodology called for administering the PSI to children 3-to-5-years-old as they entered Even Start and using these pretest scores to generate a growth curve that represents the developmental expectation for the Even Start population. By collecting systematic data from children entering Even Start at different ages between 3-and-5-years-old, one can estimate, on average, how well children of different ages will score at entry. Subsequent tests measure growth against the "baseline" scores obtained on pretest. The pretest scores of entering children reflect what they have already learned, either in a formalized preschool setting (pre-Even Start) or elsewhere. The rate of growth reflects the difference between the pretest scores of a 3 year, 2-month-old child, for example, and a 3 year, 11-month-old child, divided by the number of months between the pretest and posttest. This approach is described more comprehensively in St.Pierre et al. (1993b) and Murray et al. (1993).

Based on the earlier analyses, children in Even Start are expected to gain an average of .40 items per month.[64] In other words, the analyses of children's scores at different age points on pretests indicate that children's scores increase over time at a rate of .40 items per month. Children who are administered the PSI in Spanish are expected to gain an average of .29 items per month. Gains are expressed in terms of number of items per month because children participate in Even Start for different lengths of time (i.e., different numbers of months). We use these developmental expectations in subsequent analyses to determine whether participation in Even Start produced pretest-posttest changes that are greater than what would be expected on the basis of normal development.

GAINS ON THE PSI

Gains from Pretest to Posttest

Data from the Sample Study indicate that Even Start children gained a statistically significant amount on the PSI (Exhibit 7.3). On average, children gained 6.7 points from pretest to posttest. These gains were larger than those seen among the children in the In-Depth Study component of the first Even Start

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[64] The Even Start population has changed since the first evaluation, and the rate of growth observed in the children participating in the first national evaluation may not match what has been observed in the second evaluation.

evaluation, where the program children gained 4.5 points from the pretest to first posttest (approximately nine months later) and the control children gained 3.1 points. Another way to interpret the data is to express the size of the difference in scores from pretest to posttest in terms of a standardized gain, or standard deviation unit. In order to compare gain scores, for example, across different metrics, one divides the difference score (or the gain score) by the standard deviation of the pretest. The resulting number provides an indication of the magnitude of the effect of a given intervention or program—in this case, Even Start. A small standardized gain, or effect size, is generally in the range of .20 standard deviation units; a medium effect size is generally about .50; and a large effect size is generally in the range of .80 (Cohen, 1988). When we divide the gain by the standard deviation of the pretest, the standardized gain is .98, which is a large gain (or effect size) by general standards of social science program evaluation (Cohen, 1988).

Gains per Month

For the children in the Sample Study, the average amount of time between the pretest and the posttest was approximately seven months. Dividing individual children's gain scores by the time between pretest and posttest, we find that the average gain per month for the PSI was .96 items.

Using the information from the "norm development" analyses described earlier, we can estimate that children in the Even Start population ought to gain .40 items per month solely on the basis of normal development. Thus, the observed gain of .96 items per month can be expressed as a combination of .40 items per month due to normal development and .56 items per month due to Even Start. *This means that participation in Even Start more than doubles the expected rate of learning on the PSI.*

Exhibit 7.3: Pretest and Posttest Scores on PSI (Raw Scores from the Sample Study, 1994-95 and 1995-96)[65]

	n	Mean	S.D.
Pretest	603	13.1	6.8
Posttest	603	19.8	7.0
Gain		6.7*	
Standardized Gain		0.98	

**statistically significant, p<.05*

Exhibit reads: 603 children had both pretest and posttest scores on the PSI. Children gained an average of 6.7 points, which translates into a standardized gain of .98 standard deviation units and which is statistically significant at the p<.05 level.

This rate of growth is about the same as that observed in the first Even Start evaluation, where children gained .51 items per month above the expected .40

[65] The pretest and posttest scores represent test administrations across two program years (1994-95 and 1995-96). The typical testing pattern was for children to be pretested in the fall months and posttested in the spring of the same program year, although a small number of children were pretested in one program year and posttested in the next program year. See Exhibit 7.1.

items per month that one might expect due to maturation alone. The results also are equivalent to the largest gains on the PSI observed in other evaluations of high-quality preschool programs, such as Project Giant Step in New York City, where children gained .58 items per month above an expected .42 items due to maturation (Layzer et al., 1990).

PRESCHOOL LANGUAGE SCALE (PLS-3)

The PLS-3 was selected for this evaluation to replace the Peabody Picture Vocabulary Test (PPVT) used in the earlier evaluation in order to obtain more detailed information about children's language development.

DESCRIPTION OF THE MEASURE

The PLS-3 was developed in 1969 to assess the language development of young children, based on information about language development from the fields of psycholinguistics, human development, and speech-language pathology (Zimmerman, Steiner, and Pond, 1992). The measure can be used with children as young as 2 weeks and as old as 7 years.

The PLS-3 measures both receptive and expressive language skills and provides scores on two subscales (auditory comprehension and expressive communication) in addition to a total score. The auditory comprehension subscale assesses children's ability to process and understand language they hear, including skills in the areas of the meaning of words and concepts (content), the structure of language and syntax (form), and integrative thinking skills. The expressive communication subscale evaluates children's ability to produce language, including skills in vocal development, use of words and concepts (content), syntax (form), and integrative thinking skills.

The version of the test used in the Sample Study was revised in 1992. The test was standardized on a sample of 1,200 children, with equal numbers of males and females within each age range. The nationally representative sample was stratified on the basis of parent education, geographic region, and race.[66] The PLS-3 takes approximately thirty to forty minutes to administer and is available in English and Spanish. Raw scores are converted into standard scores based on the age of the child; national norms and age-equivalent scores also are available.

In the Sample Study, the PLS-3 was administered to children between the ages of 2 years, 6 months and 5 years, 6 months at the time of the pretest and who were expected to participate in early childhood education. The test was administered to children by program staff or staff they designated (e.g., local evaluator, staff

[66] Test-retest reliability coefficients range from .82 to .94, depending on the subscale and the age of the child. The interrater reliability was found to be .89. Reliability coefficients in this range are considered to be quite good.

from collaborating agency). Project staff were trained to administer the test in the summer of 1994.

PRETEST LEVELS ON THE PLS-3

Across 1,118 children with valid scores on this measure, the average PLS-3 Total Language Score was 86.2 points, with a standard deviation of 16.3 points (Exhibit 7.4). The PLS-3 is normed to have a mean of 100 and a standard deviation of 15, indicating that, on average, children entering Even Start scored nearly one standard deviation below the mean of the norming sample.

The PLS-3 standard scores are calculated based on the child's age. Thus, we would not expect standard scores to increase appreciably as children age. This was the case for children ages 3 to 5 years; the small group of children ages 6 years and above had higher scores but a much smaller standard deviation.

Exhibit 7.4: PLS-3 Pretest Scores (Total Language Scores from the Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Age at pretest			
2 yrs, 10 mos - 3 yrs, 11 mos	321	87.6	15.2
4 yrs, 0 mos - 4 yrs, 11 mos	469	84.1	15.1
5 yrs, 0 mos - 5 yrs, 11 mos	121	84.3	17.1
Over 5 yrs, 11 mos	29	91.6	14.8
Gender			
Male	505	84.5	16.7
Female	518	88.3	16.3
Race/Ethnicity			
African American	286	84.3	16.8
Asian	56	79.1	16.9
Hispanic	317	87.8	14.8
American Indian	26	86.7	16.0
Caucasian	265	88.8	17.6
Highest grade attained by target parent			
Grade 0-4	39	87.5	14.2
Grade 5-8	164	86.5	16.6
Grade 9-12	555	86.3	16.7
Diploma or GED	126	87.2	15.9
Some college or college degree	94	83.9	16.0
Language of test administration			
English	828	86.0	16.1
Spanish	247	88.1	15.0
Total	**1,118**	**86.2**	**16.3**

Exhibit reads: PLS-3 total language pretest data were collected on 321 children ranging in age from 2 years, 10 months to 3 years, 11 months. The mean PLS total language score for these children was 87.6 points, with a standard deviation of 15.2 points.

Pretest means also are presented for several different subgroups of children. Pretest scores were fairly close for boys and girls in the sample and also were very similar for children tested in English or Spanish. There does not seem to be

a consistent relationship between children's scores and the level of their parents' education.

GAINS ON THE PLS-3

Gains from Pretest to Posttest

Data from the Sample Study indicate that Even Start children gain a statistically significant amount on language skills as measured by the PLS-3 (Exhibit 7.5). Children gained an average of 9.2 points in auditory comprehension and 9.1 points in expressive communication between pretest and posttest. On the total language score, children gained an average of 9.7 points.

Another way to interpret the data is to express the size of the gain in terms of standard deviation units. Dividing the gain by the standard deviation of the pretest yields a standardized gain of .60 for auditory comprehension; .54 for expressive communication; and .61 for total language. These would be considered "moderate" gains in social science program evaluations.

Exhibit 7.5: Pretest and Posttest Scores on PLS-3 (Standard Scores from the Sample Study, 1994-95 and 1995-96)

		Pretest		Posttest			Std.
	n	Mean	S.D.	Mean	S.D.	Gain	Gain
Auditory Comprehension	785	86.9	15.1	96.1	16.0	9.2*	.60
Expressive Communication	784	88.0	16.3	97.0	17.2	9.1*	.54
Total Language	**781**	**86.1**	**15.8**	**95.8**	**15.4**	**9.7***	**.61**

** Statistically significant, p<.05*

Exhibit reads: 781 children had both pretest and posttest scores on the PLS. Children gained an average of 9.7 points on the total language scale, which translates into a standardized gain of .61 standard deviation units and which is statistically significant at the p<.05 level.

Gains per Month

For the children in the Sample Study, the average gain per month was 1.4 points for both auditory language and for expressive communication and 1.5 points for total language over the approximately seven months between pretest and posttest (Exhibit 7.6). Since this measure was not used in previous Even Start evaluations, we do not have a point of comparison for these figures. However, the gains per month for various subgroups of children will be discussed further in Chapter 8 of this report.

Exhibit 7.6: Gain Per Month on the PLS-3 (Standard Scores from the Sample Study, 1994-95 and 1995-96)

	n	Gain per Month
Auditory Comprehension	785	1.4
Expressive Communication	784	1.4
Total Language	**781**	**1.5**

Exhibit reads: 781 children had both a pretest and posttest on the PLS-3. The average child gained 1.5 items per month on the total language scale.

Gains Related to National Norms

Unlike the PSI, there are national norms for scores on the PLS-3 that can be used to gauge the gains achieved by Even Start children. As is the case with most standardized tests, the norms are based on a nationally representative sample of children, with representation from various economic and education groups. Thus, the norming sample likely includes more children from middle and upper income families and families where parents have more education than is the case among the Even Start population. Nevertheless, the norms are useful to compare Even Start children to a group with both disadvantaged and advantaged children.

The norms are constructed so that, at any age level, the mean is 100 standard score points with a standard deviation of 15. Even Start children had an average total language standard score of 86.1 at pretest (see Exhibit 7.5). This is 13.9 points (.93 standard deviation units) below the national norm. However, at the posttest Even Start children had an average total language standard score of 95.8. This is 4.2 points (.28 standard deviation units) below the national norm. The same pattern is seen for the auditory comprehension and expressive communication subscales. Exhibit 7.7 illustrates the mean pre- and posttest scores by children's actual age and the age equivalency that those scores represent. The difference between Even Start scores and the national norms decreases, on average, across various age levels.

Exhibit 7.7: Age-Equivalent Scores on PLS-3 at Pretest and Posttest (Raw Scores from Sample Study, 1994-95 and 1995-96)[67]

Subscale	n	Mean Raw Score	Actual Age	Age Equivalent	Difference
Auditory Comprehension					
Pretest	10	24.7	2-4 to 2-5	2-6	+1 mo.
	55	22.3	2-6 to 2-11	2-4	-2
	102	26.0	3-0 to 3-5	2-7	-5
	93	30.5	3-6 to 3-11	3-1	-7
	173	34.4	4-0 to 4-5	3-5	-7
	177	36.8	4-6 to 4-11	3-10	-8
	92	39.6	5-0 to 5-11	4-3	-9
	14	40.4	6-0 to 6-11	4-3	-21
Posttest	26	23.6	2-6 to 2-11	2-5	-1 mo.
	51	30.0	3-0 to 3-5	3-0	0
	93	31.4	3-6 to 3-11	3-1	-5
	90	35.3	4-0 to 4-5	3-7	-5
	166	39.8	4-6 to 4-11	4-3	-3
	256	41.6	5-0 to 5-11	4-8	-4
	35	40.2	6-0 to 6-11	4-3	-19
Expressive Communication					
Pretest	10	21.1	2-4 to 2-5	2-4	0 mos.
	53	20.3	2-6 to 2-11	2-2	-4
	102	24.1	3-0 to 3-5	2-8	-7
	93	28.3	3-6 to 3-11	3-1	-5
	173	32.1	4-0 to 4-5	3-6	-6
	177	35.5	4-6 to 4-11	3-11	-7
	92	39.3	5-0 to 5-11	4-4	-8
	14	40.1	6-0 to 6-11	4-6	-18
Posttest	26	21.3	2-6 to 2-11	2-10	0
	51	26.4	3-0 to 3-5	2-10	-2
	92	29.2	3-6 to 3-11	3-2	-4
	90	33.1	4-0 to 4-5	3-7	-5
	166	38.3	4-6 to 4-11	4-2	-4
	256	41.6	5-0 to 5-11	4-10	-2
	35	39.8	6-0 to 6-11	4-6	-18

Exhibit reads: At pretest, 10 children between the ages of 2 years, 4 months and 2 years, 5 months had a mean PLS-3 raw score of 21.1 in Expressive Communication. This was the age equivalent of 2 years, 4 months, and was the same as the national norm, as shown by the 0 months difference between the scores of Even Start participants and the national norms for children between 2 years, 4 months and 2 years, 5 months of age.

These results indicate that the auditory and expressive language scores of children who participated in Even Start for a school year increased when compared to the national norms. *The discrepancy between the standard scores of Even Start children and the standard scores of children in the national norms group was reduced by two-thirds between pretest and posttest, and Even Start*

[67] The pretest and posttest scores represent test administrations across two program years (1994-95 and 1995-96). The typical testing pattern was for children to be pretested in the fall months and posttested in the spring of the same program year, although a small number of children were pretested in one program year and posttested in the next program year. See Exhibit 7.1.

children moved, on average, from the 18th percentile to the 37th percentile of the norms group.

WHAT WERE THE PARENTING EDUCATION OUTCOMES?

Outcomes for parenting education were assessed by the HOME Screening Questionnaire (HSQ) (Coons et al., 1981), which replaced the set of questions about parent-child activities and the home environment contained in the first Even Start evaluation. The selection of new measures for assessing parent-child interactions reflected concern about participant and project-level burden as well as concern that measures used in the first evaluation did not adequately assess the behaviors of most interest to Even Start. The parent-child interview used in the first study suffered from high pretest means on some subscales and small gains on most subscales. Although the interview from the first evaluation was based on three key measures including the HOME, staff identified questions that required rewording and asked for guidelines for excluding families based on the age of the child. The quality of local administration in that evaluation was highly variable. Given these problems and based on recommendations from the first Even Start evaluation's Advisory Panel, we decided to assess parenting skills by replacing the questions used in the first evaluation with the HSQ.

HOME SCREENING QUESTIONNAIRE

The HSQ is a survey version of the Home Observation for Measurement of the Environment (HOME: Caldwell and Bradley, 1984), which can be administered either in the home or in a center. The HSQ covers many of the same topics as the HOME but gathers data through parent self-report rather than direct observation.

DESCRIPTION OF THE MEASURE

The HOME is an accepted measure of the quality of cognitive stimulation and emotional support provided to the child by the family. Based on observation of the home environment during a visit to each family's residence, it includes some open-ended interview items and requires more than an hour to complete. The HOME has been widely used in large-scale research studies; scores on the HOME are related to concurrent child performance on standardized cognitive measures and to later academic performance. Psychometric analyses indicate that the HOME has adequate reliability.

Researchers at the University of Colorado Medical School developed the HSQ in an effort to offer a briefer instrument that taps similar constructs with simpler data collection requirements. The HSQ is a parent-answered questionnaire written at a 3rd- or 4th-grade level. It consists of multiple choice, fill-in-the-blank, and yes/no questions and takes fifteen to twenty minutes to complete. The HSQ scoring was standardized on a sample of 1,500 low-income families.

Psychometric studies have shown that the HSQ is highly correlated with the HOME total score.[68]

Two forms of the HSQ are available, based on the age of the child: birth up to 3 years and 3 to 6 years. The instrument for younger children has thirty items and a toy list, while the instrument for older children has thirty-four items and a toy list. An administration manual provides rules for scoring each item to yield a total score. Total scores range from zero to forty-three on the form for younger children and zero to fifty-six on the form for older children. Both forms were translated into Spanish by Abt staff.

In the Sample Study, the HSQ was administered by Even Start staff to one parent per family. The questions were asked in reference to **one** child in the family; if two or more children were expected to participate in Even Start, staff were instructed to select the child expected to have the greatest involvement in the program.[69] Project staff were trained on the HSQ during the summer of 1994. A total score was calculated and used in the analyses reported here; information on individual item scores was not obtained.

PRETEST LEVELS ON THE HSQ

For the 286 parents of children less than 3 years of age in the Sample Study, the average pretest on the 0-3 version of the HSQ was 28.3, with a standard deviation of 6.0 (Exhibit 7.8). Pretest means increased as the education level of the parent goes up, from 25.1 for parents with less than a 5th-grade education to 31.4 for parents with a high school diploma or GED certificate. The average scores also were somewhat higher for parents whose primary language is English (29.4) than for parents whose first language is not English (26.5).

A larger group (745) completed the HSQ about a child between 3 and 6 years of age. Among this group, the average pretest score was 35.1, with a standard deviation of 7.9 (Exhibit 7.9). Similar patterns are seen as with the HSQ for younger children: parents with more education and parents whose primary language is English tended to score higher on the measure.

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[68] Test-retest correlations for the HSQ over the two weeks time range from .62 to .86 with internal consistency coefficients between .74 and .80 (Frankenburg and Coons, 1986).

[69] This method of selecting children for the HSQ represents a limitation in the data collection forms because the forms allow reporting only for one child. Consequently, the HSQ scores may be biased.

Exhibit 7.8: HOME Screening Questionnaire (HSQ) Pretest Scores for Parents of Children Less Than 3 Years of Age (Raw Scores from Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Highest grade at intake			
Grade 0-4	10	25.1	5.5
Grade 5-8	55	27.4	4.9
Grade 9-12	169	28.5	5.4
HS Diploma or GED	31	31.4	6.9
Primary language is English			
Yes	172	29.4	5.4
No	90	26.5	5.6
Parent gender			
Male	16	30.0	7.4
Female	247	28.3	5.5
Parent race/ethnicity			
African American	95	27.3	6.2
Asian	19	26.9	7.3
Hispanic	90	27.3	5.7
American Indian	2	31.5	2.1
Caucasian	75	31.0	5.0
Total	**286**	**28.3**	**6.0**

Exhibit reads: HSQ's were completed on 286 families with children less than 3 years of age at pretest. The average pretest score in 1994-95 or 1995-96 was 28.3 with a standard deviation of 6.0.

Exhibit 7.9: HOME Screening Questionnaire Pretest Scores for Parents of Children Three- to Six-Years-Old (Raw Scores from Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Highest grade at intake			
Grade 0-4	30	31.8	6.5
Grade 5-8	98	32.1	7.3
Grade 9-12	386	34.5	7.3
HS Diploma or GED	162	38.4	7.3
Primary language is English			
Yes	413	35.9	7.7
No	234	32.9	6.7
Parent gender			
Male	58	36.6	8.0
Female	556	35.1	7.3
Parent race/ethnicity			
African American	192	33.6	7.7
Asian	65	36.6	6.0
Hispanic	259	33.0	7.5
American Indian	20	39.6	7.3
Caucasian	196	38.2	7.9
Total	**745**	**35.1**	**7.9**

Exhibit reads: HSQ's were completed on 745 families with children between 3 and 6 years of age at pretest. The average pretest score was 35.1 with a standard deviation of 7.9.

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GAINS ON THE HSQ

Gains from Pretest to Posttest

There were significant gains from pretest to posttest on the HSQ on both versions of the measure (Exhibit 7.10). The average time between pretest and posttest was approximately seven months. Among parents whose children were less than 3 years old, there was a gain of 3.7 points from pretest to posttest, corresponding to a standardized gain of .64. An identical gain—3.7 points—was observed for parents of older children, which corresponds to a standardized gain of .55. These gains are considered moderate for program evaluations in the social sciences.

Exhibit 7.10: Pretest and Posttest Scores on the HSQ (Raw Scores from the Sample Study, 1994-95 and 1995-96)

Version of the HSQ	n	Pretest Mean	Pretest S.D.	Posttest Mean	Posttest S.D.	Gain	Std. Gain
0-3 years	121	29.3	5.8	33.0	5.8	3.7*	.64
3-6 years	317	35.2	7.1	38.8	6.4	3.7*	.55

**statistically significant, p<.05*

Exhibit reads: 121 families with children less than 3 years had both pretest and posttest scores on the HSQ. These families gained an average of 3.7 points on the HSQ, which translates into a standardized gain of .64 standard deviation units and which is statistically significant at the p<.05 level.

Gains Relative to Other Studies

The gains on the HSQ are encouraging, with larger standardized gains than were generally seen for the parent-child items in the earlier Even Start evaluation. Although there is no control group or norms group for the HSQ, one way to assess the size of these gains is by comparing them to the gains observed for the control group in a separate, ongoing evaluation of a very large demonstration program for low-income families. The Comprehensive Child Development Program (CCDP) is a family-support, two-generation program supported with federal funds from the Administration on Children, Youth and Families within the U.S. Department of Health and Human Services. As part of the national CCDP evaluation, the HSQ was administered to a sample of low-income control group parents when their children were 18 and 30 months of age. In the control group, the HSQ scores were virtually identical for children at 18 months and at 30 months (the mean scores were 20.8 and 20.2, respectively).[70] These scores suggest that we might not expect any "normal or developmental" growth over time in the HSQ scores for low-income families. They further suggest that the changes observed in the HSQ scores for Even Start families may be attributable to participation in Even Start, rather than to other factors.

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[70] HSQ scores for CCDP control group children were obtained from age-specific assessments (i.e., when the children were 18 months and 30 months of age), while HSQ scores for Even Start children were obtained at specific points during the program year, regardless of the child's age. As a result, the scores are not directly comparable across the two studies.

WHAT WERE THE ADULT EDUCATION OUTCOMES?

Projects in the Sample Study have been able to choose either the CASAS or the TABE as a measure of adult math and reading skills. Projects could choose one test for all of their students, based on a match between the test and the curricular orientation of their adult education program (e.g., CASAS for functional literacy programs or TABE for academic or GED preparation), or could administer different tests to different students based on their skill levels (CASAS for lower level students, TABE for more advanced students). Giving projects the option to administer either the TABE or the CASAS represents a change from the earlier Even Start evaluation, as does the addition of the math tests (for both CASAS and TABE). Only the CASAS reading test was used in the first evaluation.

COMPREHENSIVE ADULT STUDENT ASSESSMENT SYSTEM

The Comprehensive Adult Student Assessment System (CASAS) is an adult-oriented functional assessment system that measures a broad range of adult literacy skills and their application in real-life domains including consumer economics, government and law, occupational knowledge, community resources, and health (Rickard et al., 1990). For this evaluation, projects administered the CASAS Life Skills tests in both reading and math.

DESCRIPTION OF THE MEASURE

The CASAS has the flexibility to measure participants involved in diverse adult education programs, spanning the range from non-readers to adults at the high school level. An untimed paper-and-pencil test, each CASAS Life Skills test may take as long as sixty minutes to complete. The CASAS has been used with adult education learners in twenty-seven states. The test is used in adult education and job training programs with both native and non-native English speakers. The CASAS has been used in the National Evaluation of Adult Education Programs (Development Associates, 1992), in the evaluation of California's GAIN program (CASAS, 1990), and in theevaluation of California's 321 adult education programs (CASAS, 1991).

CASAS scores range from 150 to 260. Scale scores link the levels into a continuous scale of achievement. The test developers suggest the following interpretation of CASAS scale scores:

- **Beginning literacy (below 200)**: Adults scoring below a scale score of 200 have difficulty with the basic literacy skills needed to function in an employment setting and in the community. While these adults can handle routine entry-level jobs, they may have trouble following simple directions and safety procedures.
- **Basic literacy (200 through 214)**: Adults scoring between scale scores 200 and 214 can function in entry-level jobs that require only minimal literacy skills. They can complete simple application forms.

- **Intermediate literacy (215 through 224)**: Adults scoring between scale scores 215 and 224 are able to perform basic literacy tasks in an employment setting. They are generally able to function in jobs or job training that involves following written instructions and diagrams, although they usually have trouble following complex sets of directions.

- **High school literacy (225 and above)**: Adults scoring above a scale score of 224 can usually perform work that involves written directions in familiar and some unfamiliar situations. They generally can function at a high school entry level in basic reading. If they do not have a high school diploma, they can benefit from instruction in GED classes and have a high probability of passing the GED test in a short time.

Sticht (1990) found these interpretations to be reasonable and reported general correspondence between CASAS scale scores above 225 and the 9th- to 12th-grade reading levels on the Tests of Adult Basic Education (TABE) and the Adult Basic Learning Examination (ABLE).

There are only minimal data on the psychometric characteristics of the CASAS. A correlation of .70 between the CASAS reading test and the ABLE was reported in unpublished data. In the earlier Even Start evaluation, using data from the NEIS, an estimate of test-retest reliability was calculated using the correlation between pretest and posttest scores for adults who were posttested less than ninety days after the pretest. The correlation was .86, suggesting that the CASAS is a reliable measure. The true test-retest reliability may be even higher since this estimate is based on data using alternate forms of CASAS tests.

In the Sample Study, Even Start staff administered the CASAS Life Skills tests in reading and math. Each test has four levels, A through D, with twenty-four to forty items per level and alternate forms of each level. Staff administered a short "appraisal" test to assist in identifying the appropriate level of the CASAS. There is no Spanish version of the CASAS, and project staff were instructed to administer the sample items on the appraisal test to determine whether adults had enough ability in reading English to take the test. If an adult was not given the test due to limited English proficiency, this was noted on the ESIS form.

PRETEST LEVELS ON THE CASAS

The average pretest scale score on the CASAS reading test was 225, with a standard deviation of 18.8 (Exhibit 7.11). This score corresponds to a high school level of functional literacy and is comparable to the average baseline score from the first national Even Start evaluation. Pretest means increased as the parents' education level went up, from 188 for parents with less than a 5th-grade education to 229 for parents with some high school. The small group with a high school diploma or GED certificate scored slightly higher than those with some high school education. Not surprisingly, the average scores of native English speaking parents were higher, on average, by nearly two standard deviations than those whose primary language is not English (232 versus 208).

Exhibit 7.11: CASAS Reading Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Highest grade at intake			
Grade 0-4	13	188	12.7
Grade 5-8	38	213	21.0
Grade 9-12	126	229	13.5
HS Diploma or GED	93	231	17.1
Primary language is English			
Yes	196	232	13.3
No	80	208	17.2
Gender			
Male	27	219	21.0
Female	255	225	18.7
Race/Ethnicity			
African American	37	228	12.9
Asian	54	226	18.8
Hispanic	53	205	21.5
American Indian	20	223	3.6
Caucasian	109	233	13.9
Total	**290**	**225**	**18.8**

Exhibit reads: The CASAS reading scale was completed by 290 adults at pretest. The average pretest score was 225, with a standard deviation of 18.8.

The average pretest score on the CASAS math test was lower than for the reading—218 with a standard deviation of 13.8 (Exhibit 7.12). This score corresponds to an intermediate level of functional skills, indicating that the average Even Start adult's math skills are below the high school level at entry to the program. The pattern observed in reading scores occurs for math scores as well, with higher scores associated with higher education levels. We observed an average score of 190 for adults with less than a 5th-grade education, compared to 217 for those with some high school education. Those with a high school diploma or GED certificate scored about a half standard deviation higher, on average, than those with a 9th- to 12th-grade education (223 versus 217), suggesting that additional education may play a more substantial role in math than in reading skills. This difference is not, however, statistically significant. The difference in math scores between those whose primary language is English (220) and those who are non-native speakers (210) is less striking than the difference in reading scores.

Exhibit 7.12: CASAS Math Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Highest grade at intake			
Grade 0-4	7	190	12.7
Grade 5-8	31	215	13.3
Grade 9-12	116	217	13.0
HS Diploma or GED	85	223	12.2
Primary language is English			
Yes	192	220	12.4
No	52	210	14.6
Gender			
Male	21	218	16.2
Female	230	218	13.6
Race/Ethnicity			
African American	36	217	10.6
Asian	48	222	18.8
Hispanic	36	208	16.0
American Indian	20	216	1.1
Caucasian	102	221	13.4
Total	**257**	**218**	**13.8**

Exhibit reads: The CASAS math scale was completed by 257 adults at pretest. The average pretest score was 218 with a standard deviation of 13.8.

GAINS ON THE CASAS

Gains from Pretest to Posttest

Adults who took the CASAS reading test at both pretest and posttest gained an average of 4.5 scale score points (Exhibit 7.13), equivalent to a gain of .24 standard deviation units. Additionally, adults in the Sample Study gained an average of 6.2 points on the math test from the pretest to the posttest approximately six months later. These gains are nearly half a standard deviation in size, larger than the gain seen for reading. As noted above, initial scores were lower for the math test, allowing more room for change.

Exhibit 7.13: Pretest and Posttest Scores on the CASAS (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

		Pretest		Posttest		Gain	Std.
Test	n	Mean	S.D.	Mean	S.D.		Gain
Reading	177	228	19.2	240	17.3	4.5*	.24
Math	152	221	13.3	227	14.6	6.2*	.44

**statistically significant, p<.05*

Exhibit reads: 177 adults had both pretest and posttest scores on the CASAS reading scale. These adults gained an average of 4.5 points on the CASAS, which translates into a standardized gain of .24 standard deviation units and which is statistically significant at the p<.05 level.

When the scaled scores in reading are translated into literacy levels (Exhibit 7.14), we see that the majority of adults (62 percent) were at the high school level at both the pretest and posttest. However, there was some modest

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movement at the lower levels. For example, 10.2 percent of adults moved from an intermediate level of literacy at the pretest to the high school level at the posttest, and 6 percent moved from the basic literacy level to the intermediate level.

Exhibit 7.14: Pretest and Posttest Literacy Levels on CASAS Reading (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

Pretest	Percent of Adults by Literacy Level (n=117) Posttest			
	Beginning	Basic	Intermediate	High School
Beginning	**4.5%**	**5.1%**	**0.6%**	**0.0%**
Basic	0.0%	4.0%	6.2%	1.1%
Intermediate	0.6%	0.0%	4.5%	10.2%
High School	0.0%	0.0%	1.7%	61.6%

Exhibit reads: 10.2 percent of the adults who took the CASAS reading test moved from the "intermediate" literacy level at pretest to the "high school" literacy level at posttest.

The levels of math literacy at pretest and posttest are shown in Exhibit 7.15. Approximately 38 percent of the adults scored at the high school level at both the pretest and posttest. Approximately 22 percent of adults moved from an intermediate level of proficiency at the pretest to the high school level, and 6 percent moved from a basic to an intermediate level.

Exhibit 7.15: Pretest and Posttest Literacy Levels on CASAS Math (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

Pretest	Percent of Adults by Literacy Level (n=152) Posttest			
	Beginning	Basic	Intermediate	High School
Beginning	**5.3%**	**2.6%**	**0.0%**	**0.0%**
Basic	1.3%	7.2%	5.9%	4.0%
Intermediate	0.0%	0.7%	11.2%	21.7%
High School	0.0%	0.0%	2.6%	37.5%

Exhibit reads: 21.7 percent of the adults who took the CASAS math test moved from the "intermediate" literacy level at pretest to the "high school" literacy level at posttest.

Gains Relative to Other Studies

The magnitude of the adult literacy gains in the Sample Study is comparable to the magnitude of gains evident in other adult education programs. The gain of 4.5 points on the CASAS reading test is larger than the gain of 3.6 points observed at the first followup on the earlier Even Start evaluation. It is nearly four times larger than the 1.2 point gain observed among the control group in the In-Depth Study from the earlier evaluation.

When translated into standard deviation units, .24 in reading for the Sample Study is comparable to the .26 observed with the NEIS data from the first

evaluation. However, the analytic sample for the first evaluation was restricted to adults with at least seventy hours of instruction, which was not the case for the Sample Study due to the small sample sizes. The standardized gain for the Sample Study also is statistically equivalent to the gains reported in other adult education evaluations using the CASAS. For example, in an evaluation of federally funded adult education programs in California, researchers found average gains of 3.0 scaled score points and a standardized gain of .20 (CASAS, 1992) when adults were tested after eighty to 100 hours of instruction.

TESTS OF ADULT BASIC EDUCATION

DESCRIPTION OF THE MEASURE

The Tests of Adult Basic Education (TABE) are norm-referenced assessments designed to measure achievement in reading, mathematics, language, and spelling. The test items are written to reflect language and content appropriate for adults and to measure the understanding and applications of conventions and principles commonly taught in adult basic education curricula (CTB/McGraw-Hill, 1987). The test has been normed on a sample of adults representing participants in adult basic education programs, postsecondary vocational-technical schools, juvenile correctional facilities, and adult correctional institutions. There are four overlapping levels of the test:

- E (Easy) corresponding to grade levels 2.6 through 4.9;
- M (Medium) corresponding to grade levels 4.6 through 6.9;
- D (Difficult) corresponding to grade levels 6.6 through 8.9; and
- A (Advanced) corresponding to grade levels 8.6 through 12.9.

In the Sample Study, projects administered only the reading and mathematics tests of the TABE. The reading test assesses:

- vocabulary (e.g., synonyms, antonyms, words in context, meaning of prefixes and suffixes) and
- comprehension (e.g., extracting details from text, analyzing characters, identifying main ideas, and interpreting events).

The mathematics test measures:

- computation (e.g., addition, subtraction, multiplication, division, fractions, and percents) and
- concepts and applications (e.g., numeration, problem solving, measurement, and geometry).

There are two parallel forms for each level of the test. There also is a complete battery as well as a shorter survey version of the tests. The complete battery provides scores in each subtest (e.g., vocabulary and comprehension) as well as a

total score; the survey form provides only total scores for each test (e.g., reading and mathematics). Both tests are scored on the same scale, with scores ranging from approximately 450 to 865.

The TABE is a timed test. For the complete battery, the reading tests take approximately an hour, and the math tests are allotted about ninety minutes. The reading and math survey forms have about half of the items of the full battery tests and take about thirty minutes each. Prior to taking either the full battery or the survey form, students are given a locator test to determine the appropriate level of the tests to be administered.

In the Sample Study, Even Start staff or staff at collaborating agencies administered the TABE reading and math tests. They had the choice of the full battery or the survey form. The TABE was administered in English (Although there is a Spanish language version of the TABE, it was not used in this study). Project staff were instructed to administer the sample items on the locator test to determine whether adults had enough ability in reading English to take the test. If an adult was not given the test due to limited English proficiency, this was noted on the ESIS form.

PRETEST LEVELS ON THE TABE

The average pretest scale score on the TABE reading test was 708, with a standard deviation of 98.3 (Exhibit 7.16). This score corresponds to about the end of 5th-grade reading level.[71] Pretest means increase as the education level of the parent goes up, from 579 for parents with less than a 5th-grade education to 714 for parents with some high school. Interestingly, unlike what we observed in the CASAS, the small group with a high school diploma or GED certificate scored slightly lower than those with some high school education. Parents whose primary language is English had average scores about one-third of a standard deviation higher than those whose primary language is not English (710 versus 677).

The average pretest score on the TABE math test was almost equivalent to the reading—706 with a standard deviation of 102.0 (Exhibit 7.17). Math scores, like reading scores, increased with higher education levels, from an average score of 584 for adults with less than a 5th-grade education to 711 for those with some high school education. Again, those with a high school diploma or GED certificate scored slightly below those with a 9th- to 12th-grade education (690 for the diploma/GED group versus 711). The small group of adults whose

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[71] Although we cannot explain why the adults who took the TABE have lower reading levels, on average, than those who took the CASAS, it is clear that there are some systematic differences between the two groups of adults. On average, those who were assessed with the CASAS, for example, have completed more years of schooling, have lower scores on the need index, are more likely to be African-American, and are more likely to speak Spanish as the primary language at home than those who were assessed with the TABE. Each of these comparisons is statistically significant at the .001 level, using t-tests or chi-square tests of association.

primary language is not English scored slightly lower, on average, than adults whose primary language is English (690 versus 706).

Exhibit 7.16: TABE Reading Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Highest grade at intake			
Grade 0-4	2	579	102.5
Grade 5-8	94	693	120.5
Grade 9-12	517	714	93.3
HS Diploma or GED	59	688	105.6
Primary language is English			
Yes	635	710	98.4
No	38	677	119.2
Gender			
Male	29	687	122.5
Female	683	708	97.3
Race/Ethnicity			
African American	365	703	94.8
Asian	5	727	63.2
Hispanic (only administered in English)	59	676	128.7
American Indian	5	698	128.3
Caucasian	232	723	98.0
Total	**748**	**708**	**98.3**

Exhibit reads: The TABE reading scale was completed by 748 adults at pretest. The average pretest score was 708 with a standard deviation of 98.3.

Exhibit 7.17: TABE Math Pretest Scores (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

Group	n	Mean	S.D.
Highest grade at intake			
Grade 0-4	2	584	92.6
Grade 5-8	91	690	112.3
Grade 9-12	498	711	97.8
HS Diploma or GED	59	690	119.4
Primary language is English			
Yes	616	706	102.4
No	35	690	113.1
Gender			
Male	28	678	131.2
Female	661	707	100.6
Race/Ethnicity			
African American	353	707	98.5
Asian	4	752	28.6
Hispanic	57	683	132.1
American Indian	5	702	124.2
Caucasian	225	708	103.1
Total	**725**	**706**	**102.0**

Exhibit reads: The TABE math scale was completed by 725 adults at pretest. The average pretest score was 706 with a standard deviation of 102.0.

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GAINS ON THE TABE

Gains from Pretest to Posttest

The sample of adults who took the TABE reading test at both pretest and posttest gained an average of twenty-seven scale-score points (Exhibit 7.18). This is a statistically significant difference over the approximately six months between pretest and posttest. These gains are comparable to those on the CASAS, corresponding to a standardized gain of .29 standard deviation units.

As Exhibit 7.18 shows, adults in the Sample Study gained an average of twenty-six points on the TABE math test from the pretest to the posttest approximately six months later, corresponding to a standardized gain of .25 standard deviation units. This gain is more modest than the .44 standard deviation units observed in the CASAS math gain scores.

Gains Related to National Norms

The national norms on the TABE can be used to provide information about how the reading and math scores of Even Start adults compare to those of other students in adult education programs. In particular, TABE scaled scores can be translated into grade equivalent scores, which have been obtained by calibrating the TABE scores to the norming sample for California Achievement Test (CAT) used with children in elementary and secondary grades. Thus, a grade equivalent score on the TABE of 6.8 means that the test taker's performance is equivalent to the typical CAT performance of students who have completed eight months of the 6th grade.

Exhibit 7.18: Pretest and Posttest Scores on the TABE (Scaled Scores from the Sample Study, 1994-95 and 1995-96)

		Pretest		Posttest		Gain	Std.
Test	n	Mean	S.D.	Mean	S.D.		Gain
Reading	328	697	103.0	724	87.7	27.2*	.29
Math	304	698	109.0	724	101.1	26.0*	.25

**statistically significant, p< .05*

Exhibit reads: 328 adults had both pretest and posttest scores on the TABE reading scale. These adults gained an average of twenty-seven points on the TABE, which translates into a standardized gain of .29 standard deviation units and which is statistically significant at the p< .05 level.

To look at the grade equivalent scores of the Even Start adults, we split the sample at pretest and posttest into quartiles and computed the grade equivalent scores of students at the twenty-fifth, fiftieth, and seventy-fifth percentile. As Exhibit 7.19 shows, the scores of students at the fiftieth percentile (i.e., the median) on the reading test at pretest correspond to a grade equivalent of 6.4; by posttest, students at the median had a 7.9 grade equivalent score.

Exhibit 7.19: Grade Equivalent Scores Corresponding to TABE Reading and Math Quartiles at Pretest and Posttest (1994-95 and 1995-96)[72]

Quartile by Test	Pretest		Posttest	
	Scale Score	Grade Equiv.	Scale Score	Grade Equiv.
Reading				
25%	665	3.4	695	4.7
50% (median)	731	6.4	751	7.9
75%	766	9.3	784	12.9+
Math				
25%	676	3.7	705	5.4
50% (median)	740	6.6	757	7.5
75%	767	7.8	789	10.9

Exhibit reads: The median TABE reading scale score was 731 at pretest and 751 at posttest. This corresponds to grade equivalent scores of 6.4 (at pretest) and 7.9 (at posttest).

Similar growth was evidenced for the math test. In general, for the reading and math tests, students at the median gained about one-and-a-half grade levels from pretest to posttest, while students at the seventy-fifth percentile gained three grade levels over the same six months.

WHAT WERE THE OUTCOMES ON OTHER PROGRESS INDICATORS?

In addition to tests and interviews, this evaluation collected information about adults' progress in education, employment, and other credentials such as obtaining a driver's license and U.S. citizenship. This information is available for both the Universe Study and the Sample Study. In this section, we present findings on progress made on these indicators and, where comparable data are available, compare these results to progress reported in the earlier Even Start evaluation. It is important to note that some of these other indicators are not necessarily goals for most adult participants; we report progress on the indicators as one additional snapshot of adult participants.

ATTAINMENT OF A GED CERTIFICATE

DESCRIPTION OF THE MEASURE

Receiving the GED certificate is a goal for many participants in adult education programs, including Even Start. However, many project staff pointed out that

[72] While data from studies of other individual adult education projects do not present reliable data on pretest and posttest assessments, we do know that states are beginning to implement performance standards for participants in adult education programs. In Connecticut, for example, the state recently articulated a standard of 75 hours of instruction corresponding to a one grade-level increase.

the GED may be an unreasonable or unattainable goal for many adults with low-level skills. Through the ESIS, projects provided information not only about the number of adults who attained the GED certificate but also about the number working toward that goal. This is more detailed information than was obtained in the first national Even Start evaluation.

CHANGES IN GED ATTAINMENT

Approximately half of the adults in both the Universe Study and the Sample Study were working toward the GED certificate (Exhibit 7.20). Approximately the same proportion (10 percent) in both the Universe and Sample Studies attained the GED during the 1995-96 program year (based on the sample of adults who did not have a high school diploma or GED at the beginning of the Even Start project year). Interestingly, attainment of the GED was not a goal for approximately one-third of the adults.

In the first Even Start evaluation, the NEIS reported that 7.1 percent of adults without a high school diploma at intake attained the certificate over one program year. This figure is quite comparable to what we see among the Universe Study participants. In the earlier In-Depth Study, 14.3 percent of adults in the program and 3.6 percent of the control group attained a GED over a nine-month period. The percentage of adults in the Sample Study who attained the GED certificate was less than that of the In-Depth Study and remained somewhat higher than the proportion in the IDS control group.

When we examine data on GED preparation in other settings, we learn that approximately 30 percent of those who take the GED have been enrolled in a program that focuses on basic skills and that low-literacy learners are more likely to participate in such a program than those learners with stronger literacy skills (Baldwin, Kirsch, Rock, and Yamamoto, 1995).

Exhibit 7:20: Progress Toward GED Certificate Among Adults Without High School Diploma or GED (Universe Study and Sample Study, 1994-95 and 1995-96)

	Percent of Adults			
	Universe Study		Sample Study	
	1994-95	1995-96	1994-95	1995-96
Progress Toward GED	n = 16,226	n = 31,481	n = 123	n = 1,502
GED is not a current goal	36.3%	37.7%	7.3%	30.4%
Working toward a GED	50.2%	46.5%	58.5%	53.2%
Taken part of GED tests but not yet completed	5.2%	6.0%	10.3%	6.1%
Attained a GED since participating in Even Start	8.2%	9.8%	24.4%	10.3%

Note: The small number of Sample Study participants for whom we have data from the 1994-95 program year reflects the number of new families enrolled in Even Start during that program year for whom we also have data on GED attainment.

Exhibit reads: In 1995-96, obtaining a GED was not a goal for 30.4 percent of parents in the Sample Study.

EMPLOYMENT STATUS

DESCRIPTION OF THE MEASURE

Participants were asked when they enrolled in Even Start and again at the end of the program year whether they were employed either part-time or full-time. This information is available for adults in the Universe Study and the Sample Study. Although employment is not a primary goal of the Even Start program, it is possible that increased education and literacy levels will result in changes in employment status.

CHANGES IN EMPLOYMENT STATUS

The majority of adults in both the Universe Study (61.7 percent) and the Sample Study (64.7 percent) were not employed at either the beginning or end of the program year (Exhibit 7.21). Approximately one-fifth each of the adults in the Universe Study and the Sample Study were employed at both points in time. Slightly more than 10 percent of adults were not employed at the beginning of the year but were employed at the end of the year.

In the first evaluation, the results were reported slightly differently, restricting the sample to those adults who were not employed at the start of the year. For that study, nearly 78 percent of adults were not employed at intake; of those, nearly 10 percent found employment by the end of the program year. In the In-Depth Study, 12 percent of the program group and 15 percent of the control group found work by the end of the first program year. When data from the current study are restricted to those adults who were not employed at the start of the program year, we find that 18 percent of adults in the Universe Study and 16 percent of adults in the Sample Study found work by the end of the program year. (These figures differ from those displayed in the table below because in order to compare data from the current evaluation with data from the first evaluation the sample has to be defined differently.) These figures remain comparable to the results reported from the earlier evaluation.

Exhibit 7.21: Employment Status at Beginning and End of 1994-95 and 1995-96 Even Start Years (Universe Study and Sample Study)

	Percent of Adults					
	Employed at beginning and end of year		Not employed at beginning and end of year		Not employed at beginning, employed at end of year	
Sample	94-95	95-96	94-95	95-96	94-95	95-96
Universe Study (1994-95 N = 16,419; 1995-96 N = 28,632)	22.0%	20.2%	68.5%	61.7%	10.5%	13.4%
Sample Study (1994-95 n = 151; 1995-96 n = 1,369)	14.6%	19.7%	70.2%	64.7%	8.6%	12.4%

Exhibit reads: In 1995-96, nearly 65 percent of the adults in the Sample Study were not employed both at the beginning and at the end of the Even Start project year.

OTHER PROGRESS INDICATORS

DESCRIPTION OF THE MEASURES

Even Start program staff at the local, state and federal levels were interested in the extent to which Even Start participants achieve other credentials that require reading and completing written tests or other criteria. Examples include becoming a U.S. citizen and obtaining a driver's license. Each of these represents a goal that is likely to have more tangible meaning for adults than simply taking a test. For the current evaluation, project staff indicated whether each of these progress indicators was a goal for adults this year and whether they were working on or achieved the goal during the Even Start year. These data are available for both the Universe Study and the Sample Study, but they were not collected during the first Even Start evaluation.

CHANGES IN PROGRESS INDICATORS

For most adults, these progress indicators were not goals during the current year (Exhibit 7.22). In the Universe Study, approximately 5 percent of adults were working toward U.S. citizenship or a driver's license; in the Sample Study a comparable proportion was working toward citizenship and a smaller proportion (3 percent) was working toward a driver's license. Only about 1 percent of adults in either the Universe or Sample Study obtained U.S. citizenship during the 1995-96 program year, and 3 percent to 5 percent obtained a driver's license.

Exhibit 7.22: Other Progress Indicators for Even Start Adults (Universe Study and Sample Study, 1995-96)

Progress Indicators	N	Goal This Year	Working Toward	Obtained
Universe Study	**29,232**			
U.S. Citizenship	1,812	6.2%	5.2%	1.0%
Driver's License	2,572	8.8%	5.7%	3.1%
Sample Study	**1,245**			
U.S. Citizenship	90	7.2%	6.4%	0.8%
Driver's License	98	7.9%	3.4%	4.5%

Exhibit reads: In 1995-96, achieving U.S. citizenship was a goal of 6.2 percent of the adults in the Universe Study.

FINDINGS FROM TWO EVALUATIONS: A DETAILED REVIEW

At this point we will bring together specific outcome data from the first and second Even Start evaluations in order to discuss further what we have learned about the effects of Even Start on children's cognitive development and adult literacy.

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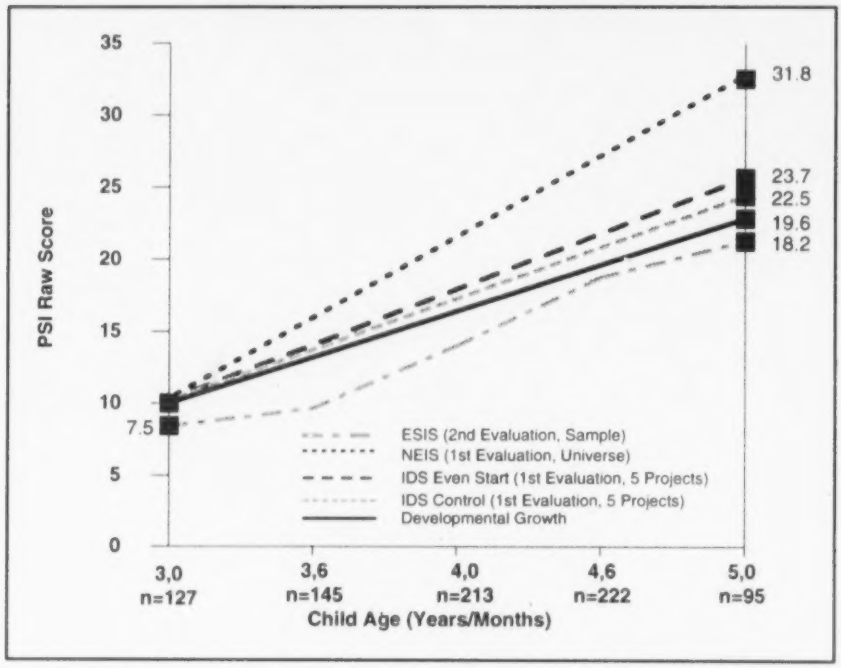
CHILD COGNITIVE DEVELOPMENT

We first consider the findings based on PSI scores. The line labeled "developmental growth" in Exhibit 7.23 shows that children's scores on the PSI increase as they age, by about .40 items per month. This is one estimate, derived from an analysis of PSI pretest scores, of how we can expect Even Start children to perform on the PSI in the absence of any intervention. The two lines labeled NEIS and ESIS show the observed PSI growth rates for children in the first and second evaluations, respectively. Note that these two lines are roughly parallel, indicating that the growth rates are very similar (about .90 items per month). This rate is more than double the expected developmental growth rate of approximately .40 items per month. This analysis would lead us to conclude that Even Start has an important impact on children's PSI scores.

But other data also are available. The two lines on Exhibit 7.23 labeled IDS Even Start and IDS Control show the growth rates for children in the five sites that participated in an experimental "In-Depth Study" during the first evaluation. The growth rates for children in these groups fall between expected developmental growth and the NEIS "universe" group. This is not unexpected; the five sites selected for the In-Depth Study cannot be expected to exactly mirror the universe of Even Start projects.

Exhibit 7.23: PSI Growth for Different Even Start Evaluation Samples, Compared With Developmental Growth



Note: The numbers presented below each age range marker (e.g., 3,0, which includes children between the ages of 3 years, 0 months and 3 years, 5 months) indicate the number of children in the Sample Study for whom we have valid test scores on the PSI.

Exhibit reads: Both Even Start children and children in a control group achieved gains on the PSI.

On the other hand, the difference in growth rates between the randomly assigned Even Start and control group children is not statistically significant, indicating that we see no special effect of being in Even Start. Additional analyses, presented in the first evaluation report, show that the straight line growth rates presented in Exhibit 7.23 are a bit misleading. In particular, Even Start children in the IDS sites outscored control group children during their first year in the program, when control group children typically were not in any organized preschool program. However, control group children's PSI scores caught up once they entered preschool or the public school system.

The same pattern is seen in an analysis of data from the Peabody Picture Vocabulary Test (PPVT), a measure used only in the first evaluation. Exhibit 7.24 shows that the universe of children in the first evaluation gained at a faster rate than children in the IDS study. Children in the IDS Even Start group gained more than IDS control group children from pretest to the first posttest. However, control group children caught up by the time that the second posttest was administered.

Exhibit 7.24: PPVT Growth for Different Even Start Evaluation Samples

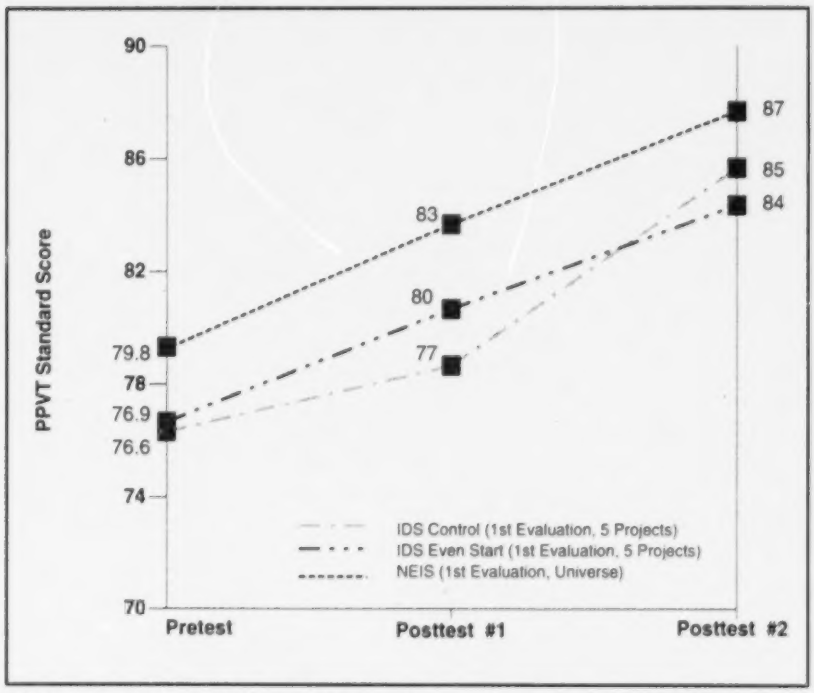


Exhibit reads: Children in the In-Depth Study Even Start sample scored higher on the PPVT than children in the control group at the first posttest; children in the control group caught up by the second posttest.

Analysis of data collected on the PLS-3 in the second Even Start evaluation shows growth from pretest to posttest (over a single school year), and this growth partially closes the gap between Even Start children and children in the PLS norms group (Exhibit 7.25). It is important to note that there is no control

group of children in the second evaluation. The followup scores we have for a substantially smaller number of children on the PLS indicate that scores declined slightly. In fact, the group of children with pretest, posttest #1, and posttest #2 scores consistently scored, on average, below the children with only pretest and posttest #1 scores.

It appears from all of these measures that children get a "boost" in cognitive development when they first are exposed to an organized school setting (preschool or the public schools). Enrollment in Even Start ensures that such an exposure occurs at an earlier age, and so Even Start children get an earlier boost than control group children. The question to be answered by future research is whether that early boost translates into other types of benefits for Even Start children.

Exhibit 7.25: PLS-3 Growth for the ESIS Evaluation Sample

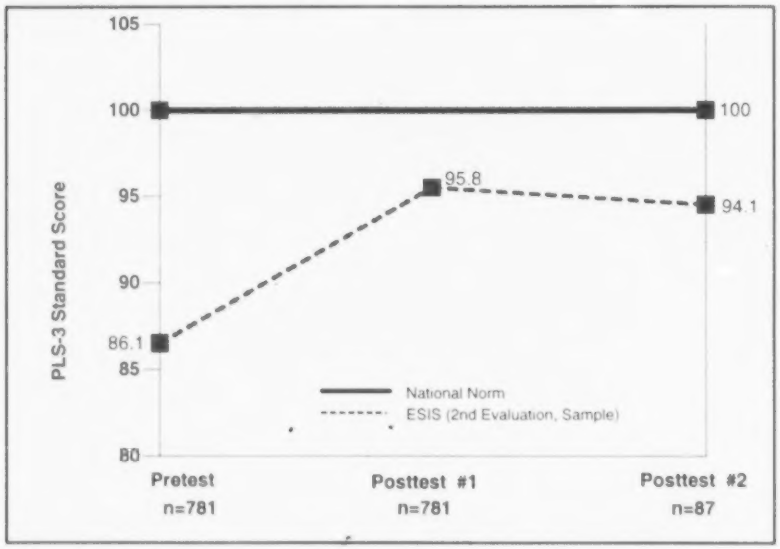


Exhibit reads: Children in Even Start in 1994-95 and 1995-96 scored closer to the national norm on the PLS-3 at first posttest than at pretest. No control group data are available for this analysis.

ADULT LITERACY DEVELOPMENT

We now review specific findings regarding adult basic skills development from the two evaluations. According to the CASAS developers, a score of 225 on the CASAS reading test signifies high school level performance. Exhibit 7.26 shows that all of the Even Start evaluation groups performed at or above this level. The exhibit also shows that adults in both the first and second Even Start evaluations (NEIS and ESIS) made pretest-posttest gains on the CASAS reading test. Those gains were as large or larger than the gains observed in other studies of adult education programs.

Was Even Start responsible for the gains? One way of judging this is to examine the CASAS reading scores of adults who participated in the random assignment

In-Depth Study that was conducted in five projects as part of the first Even Start evaluation. The Even Start IDS group did not gain much from pretest to first posttest (one school year) but made a more substantial gain from the first posttest to the second posttest (the second school year). While the IDS control group started out a few points lower at pretest, their growth rate exactly paralleled the Even Start group. This occurred, in part, because adults in the IDS control group also availed themselves of local adult education programs, leading to the conclusion that while Even Start adults do make gains on the CASAS reading test, we cannot necessarily attribute those gains to Even Start.

Exhibit 7.26: CASAS Reading Growth for Different Even Start Samples

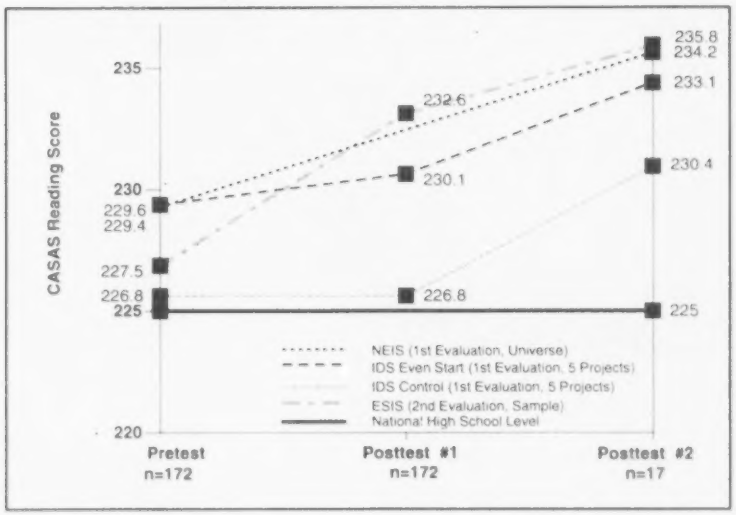


Exhibit reads: Even Start adults achieved gains on the CASAS reading test, but so did adults in a control group (as part of the first evaluation).

Even Start adults also showed a pattern of growth on the CASAS math test, which was used only in the second evaluation. Exhibit 7.27 shows that Even Start adults who entered the program scored almost half a standard deviation below the high school level. After one program year, their scores had increased so that they were able to perform high school level work. While it is an impressive gain, we do not have a control group against which to gauge the progress of Even Start adults. Hence, we cannot unambiguously attribute this growth to Even Start.

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Exhibit 7.27: CASAS Math Growth for the ESIS Evaluation Sample

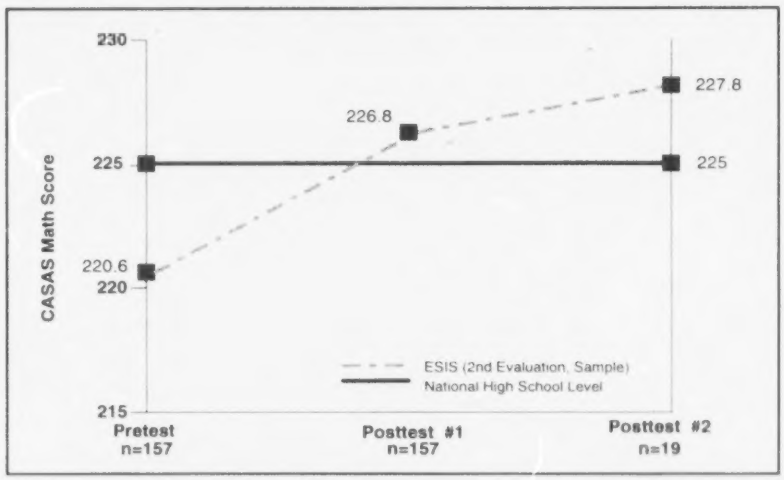

Exhibit reads: Even Start adults who took the CASAS math test scored below the high school level at pretest, but their scores increased to the high school level at posttest. No control group data are available for this analysis.

Exhibit 7.28 presents growth data for Even Start adults on the TABE reading and math tests. Both of these measures were used only in the second evaluation. While adults showed clear gains between the pretest and first posttest of about .3 standard deviation units on each test, we have no control group and are unsure of the extent to which Even Start was responsible for these gains. Further, for the small number of adults with a second posttest, there was a decline in scores. Interestingly, for those few adults with a second posttest, the reading scores were consistently lower, on average, than the reading scores for adults with only a pretest and posttest #1, while the math scores were close to the mean scores.

Based on these data we are faced with uncertainty about Even Start's effects on adult literacy. Clearly, adults who participate in Even Start make gains on all of the measures that have been used. Gains in math appear to be larger than gains in reading. However, where data are available on adults not in Even Start, they too make gains, possibly because they too take part in adult education programs.

Exhibit 7.28: TABE Reading and Math Growth for the ESIS Evaluation Samples

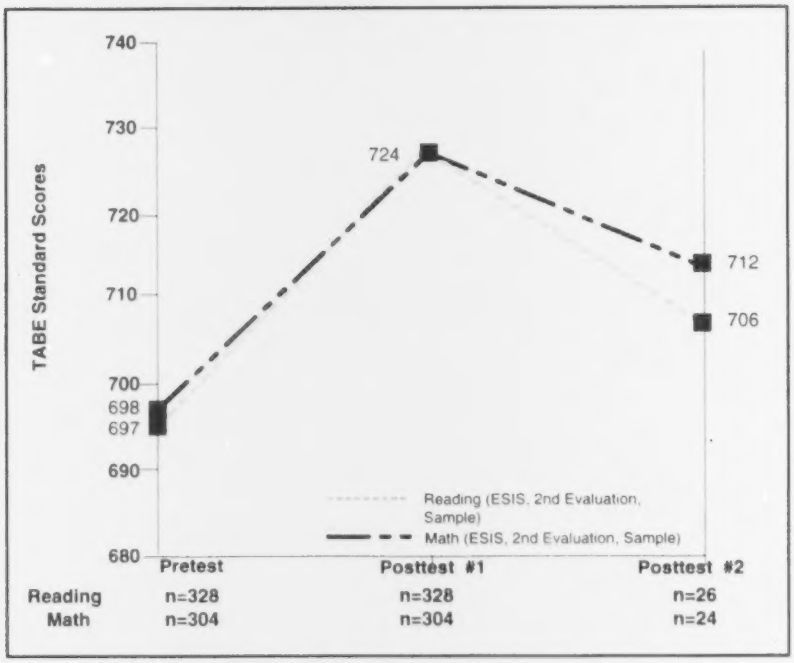

Exhibit reads: Even Start adults achieved gains on the TABE reading and math tests. No control group data are available for this analysis.

A final piece of information about adult literacy is presented in Exhibit 7.29, which shows the rate at which adults attained a GED while in Even Start. The two "universe" data (from the first and second evaluations) showed that 8 percent and 9.8 percent of Even Start adults attained a GED over a program year. The random assignment In-Depth Study from the first evaluation shows that adults in Even Start were far more likely to attain a GED than control group adults (22 percent versus 6 percent).

It seems clear that Even Start does help adults get a GED. The next question is, "How helpful is a GED?" There is little evidence that a GED can be equated with any particular level of literacy performance or gains (e.g., the New Chance evaluation conducted by Quint et al; 1994). Recent research by Murnane, Willett, and Boudett (1995) shows that attainment of a GED is better in an economic sense than not having a GED but is not as beneficial as having a high school diploma.

The GED credential is an important focus of many Even Start projects and a goal that seems achievable for many Even Start adults within a reasonable amount of time. As mentioned earlier, more than 60 percent of Even Start adults indicate that attaining the GED indeed is a goal. Recent research on adults' literacy skills found comparable literacy levels when contrasting GED examinees to National Adult Literacy Survey (NALS) respondents. This raises some potential questions about the value of a GED versus more traditional high school completion (Baldwin et al., 1995). At the same time, there also is recent

research that documents the value of the GED as a credential in terms of future employment earnings (Murnane, Willett, and Boudett, 1995). However, there is some research that suggests that GED attainment is unlikely in the short term for first-level adult learners who enter adult education programs with less than a 5th-grade education or equivalent (Stites, Wagner, Foley, and St.Pierre, 1996).

Exhibit 7.29: Rate of GED Attainment for Different Even Start Evaluation Samples

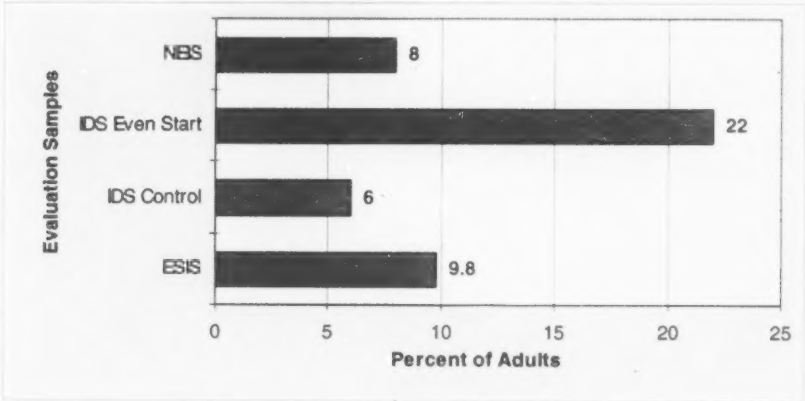

Exhibit reads: The IDS Even Start adults attained GEDs at a much faster rate than the control group adults.

This presents a challenge for many of the Even Start projects because approximately half of adult enrollees enter Even Start having completed less than a 10th-grade education, and it suggests that for those adults with little or no high school experience, GED attainment is a long-term goal. While this debate about the value of a GED will undoubtedly continue, we also know that many Even Start participants enroll for several reasons, including furthering their education (and attaining a GED). Even Start projects provide an array of literacy education services, in addition to GED preparation, to help participating families improve their literacy skills.

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CHAPTER 8: DO PROGRAM OUTCOMES VARY DEPENDING ON PARTICIPANT AND PROJECT CHARACTERISTICS?

This chapter is exploratory in nature. It seeks to determine whether or not there are relationships between child-parent gains on various outcome measures and either participant characteristics or project characteristics. If we find that such relationships do exist, we cannot be certain how best to interpret them (i.e., correlation does not imply causality). We also want to offer a caution about these analyses because they are based primarily upon data only from participants with valid pretest and posttest scores. As a result, even the exploratory findings reflect a bias in favor of continuing participants who, on average, may have more experience with education and who may well have greater supports in the home. What this means for our analyses is that we may well be overestimating the effects of participation in Even Start. In spite of this caution, however, we hope that the analyses discussed here will be provocative and perhaps can suggest fruitful avenues for further research.

In this chapter we discuss two outcome variables for children (the PSI and PLS-3); four outcomes for parents (the CASAS reading and math tests and the TABE reading and math tests); and two family outcomes (the HOME Screening Questionnaire for children ages 0 to 3 and children ages 3 to 6). These measures are described in more detail in Chapter 7.

Participant characteristics used in the analysis include the number of hours of instruction received by parents in adult education and in parenting education; the number of hours of instruction received by children in early childhood education; and the number of hours that parents and their children spent in joint Even Start activities. These numbers were recorded by local project staff on a monthly basis throughout the year. In addition, an index of family "need," which was discussed in Chapter 6 of this report, is used as a participant characteristic.

Finally, several project characteristics are used in the analysis, including the amount of the federal Even Start grant; the number of families served by the project; the number of staff employed by the project; the qualifications and experience of project staff; the number of hours of core services offered to adults and children (as distinct from the number of hours received, which is treated as a participant characteristic); the percentage of core service hours offered in a home-based mode; and whether the project offers child care and transportation as support services. Because our analyses were exploratory in nature, we sought first to identify relationships between individual predictors and specific outcomes, and subsequently, results permitting, to develop more complex (or multivariate) models predicting outcomes.

How Do Outcomes Vary by Participant Characteristics?

Here we examine the extent to which there are statistically significant relationships between outcomes for children and parents and participant characteristics on dimensions such as monthly hours of core services received and family needs. Each of the analyses reported was based on a simple regression model in which the posttest value of a given outcome variable was predicted from the pretest value of that variable and the participant characteristic in question. We began with simple regression models because we first wanted to learn whether there were any relationships between individual predictors that we could subsequently pursue. Data from the first Even Start evaluation also were reviewed where appropriate to examine patterns over the duration of the Even Start program.

Hours of Core Service Received

The number of hours of core services received by all adults and children participating in the Sample Study is shown in Exhibit 8.1 for each of two program years (1994-95 and 1995-96). The exhibit shows the total number of hours of service received over the program year as well as the average number of hours per month for those months in which families participated.

Exhibit 8.1: Amount of Core Services Received, All Families in the Sample Study (1994-95 and 1995-96)

	1994-95 (July 1994 - June 1995)			1995-96 (July 1995 - June 1996)		
Service Area	n	Mean	S.D.	n	Mean	S.D.
Adult Basic Education						
Total hours	415	154.0	147.6	645	116.7	119.3
Hours/month	415	23.2	16.6	645	22.2	16.7
Parenting Education						
Total hours	481	53.5	55.2	670	34.7	43.5
Hours/month	481	7.6	6.2	670	6.5	5.8
Early Childhood Education for Children Under Age 2.5 to 4.5 Years						
Total hours	323	313.5	253.5	232	323.5	304.7
Hours/month	323	37.5	25.0	232	39.8	29.5
Early Childhood Education for Children Ages 4.5 to 7 Years						
Total Hours	177	290.9	220.6	137	326.8	299.0
Hours/month	177	35.5	23.6	137	34.8	28.2

Note: This exhibit includes participation information on all families, whether or not families had been tested at all. As a result, the mean values for the number of hours are based upon data from families whose core service participation was only a few hours as well as for those families with more than 100 hours of participation over the course of each program year.

Exhibit reads: The average Even Start parent participating in the Sample Study in 1995-96 received 22.2 hours of adult basic education each month and a total of 116.7 hours of adult basic education over the entire program year.

The number of hours per month received by Even Start families in each of the core service areas changed little from 1994-95 to 1995-96. In both years, adults

received about twenty-three hours per month of adult education (about five or six hours per week) and seven hours per month of parenting education (about 1.75 hours per week). Children received between thirty-five and forty hours per month of early childhood education (about nine or ten hours per week, equivalent to a 2.5 hour/day program four days a week).

The number of hours per month of adult education and early childhood education shown in Exhibit 8.1 is higher than was reported in the first Even Start evaluation. Based on families included in the Sample Study, Even Start adults received about twenty-three hours of adult education per month in 1994-95 and 1995-96, compared with 13.5 hours for families participating in the first evaluation. The standard deviation for amount of adult education received is quite large in each of these studies, indicating that there continues to be great variation in the amount of services received from individual to individual.

The same conclusion holds for amount of early childhood education: children 2 to 4.5 years of age in the Sample Study received an average of 37.5 hours per month of early childhood education services in 1994-95 and 39.8 hours per month in 1995-96, compared with twenty-six hours per month in the first evaluation. However, the amount of parenting education has remained quite stable over time, averaging 6.5 hours per month in the first evaluation, 7.6 hours per month in 1994-95, and 6.5 hours per month in 1995-96.

There are several possible explanations for the general increase in amount of "academic" services received by participating families. One explanation is that different projects participated in the two studies. It may be that the newer projects simply offered more intensive programs than projects in the first evaluation. This explanation is bolstered by two factors: in recent years the Department of Education has been pushing Even Start projects to provide more intensive service levels, and in 1996, the Even Start law was amended to reflect a requirement that projects offer intensive instructional programs. Another possible explanation is that different types of parents may have participated in the two studies. It may be that Even Start projects now are recruiting parents who are more motivated and interested in participating than parents who were recruited for the first study.

As we described earlier, families with only pretest data are systematically different from those with both pretest and posttest data. Families with both pretest and posttest data are, on average, more likely to be employed, have higher incomes, and speak languages other than English at home. Further, families with both pretest and posttest data are less likely, on average, to be headed by single parents, and mothers in the pretest and posttest group have, on average, completed nearly one more year of schooling than mothers with only pretest data. Consequently, the comparisons described are likely to overestimate the effects of participation in Even Start. This caveat should be remembered throughout the rest of this chapter and subsequent sections of this report. The averages presented in Exhibit 8.1 mask the variation in amount of service received by two distinct groups of families:

- families who were pretested but not posttested as part of the Sample Study—these are families who probably dropped out of the program during the year, as shown in Exhibit 8.2; and
- families who participated fully in the Sample Study—these are families who were pretested and posttested, as shown in Exhibit 8.3.

Exhibit 8.2: Amount of Core Services Received, Families Tested at Pretest But Not at Posttest (Sample Study) (1994-95 and 1995-96)

	1994-95 (July 1994 - June 1995)			1995-96 (July 1995 - June 1996)		
Service Area	n	Mean	S.D.	n	Mean	S.D.
Adult Basic Education						
Total hours	207	88.0	86.0	366	81.8	105.9
Hours/month	207	20.4	15.5	366	20.9	17.5
Parenting Education						
Total hours	180	28.2	28.6	392	19.0	23.8
Hours/month	180	6.0	4.8	392	5.3	4.6
Early Childhood Education for Children Under Age 2.5 to 4.5 Years						
Total hours	68	164.0	165.8	76	166.0	146.4
Hours/month	68	28.3	22.5	76	31.1	26.8
Early Childhood Education for Children Ages 4.5 to 7 Years						
Total Hours	34	206.1	176.1	33	211.2	176.1
Hours/month	34	34.5	23.7	33	34.8	23.7

Exhibit reads: In 1994-95, 207 adults who completed only a pretest participated in an average of eighty-eight hours of adult education over the program year; in 1995-96, 366 adults who completed only the pretest participated in an average of 81.8 hours.

Exhibit 8.3: Amount of Core Services Received, Families Tested at Pretest and at Posttest (Sample Study) (1994-95 and 1995-96)

	1994-95 (July 1994 - June 1995)			1995-96 (July 1995 - June 1996)		
Service Area	n	Mean	S.D.	n	Mean	S.D.
Adult Basic Education						
Total hours	208	219.6	161.6	240	172.3	117.2
Hours/month	208	25.9	15.9	240	25.1	15.3
Parenting Education						
Total hours	301	68.6	61.4	240	59.2	54.1
Hours/month	301	8.6	6.8	240	8.5	6.9
Early Childhood Education for Children Under Age 2.5 to 4.5 Years						
Total hours	255	353.5	260.3	141	398.1	333.7
Hours/month	255	40.0	26.3	141	43.3	32.7
Early Childhood Education for Children Ages 4.5 to 7 Years						
Total Hours	143	311.1	227.9	83	357.7	309.6
Hours/month	143	35.7	23.2	83	40.0	29.3

Note: The exhibit includes only those families with both pretest and posttest data, and it includes information on the number of hours of participation across the entire program year.

Exhibit reads: The 240 adults who were pretested and posttested in 1995-96 received an average of 172.3 hours of adult education.

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Adults who were pretested and posttested received somewhat more adult education (about twenty-five hours per month versus about twenty-one hours per month) and parenting education (about 8.5 hours per month versus five to six hours per month) than adults who were only pretested. This suggests that even while they were active in the program, there were differences in the participation patterns of these two groups of adults.

The contrast between the two groups is much greater when we compare the total amount of service received. Adults who were pretested and posttested (Exhibit 8.3) received more than twice as much total adult education and parenting education hours as adults who were pretested but who never took a posttest (Exhibit 8.2). This makes sense, since families who took the two tests participated for about twice as many months (eight months) as those families who were only pretested (four months).

The same pattern holds for children. Children who were pretested and posttested received somewhat more early childhood education per month than children who only took the pretest (about forty hours per month versus thirty hours per month for children under 4.5 years, and about forty hours per month versus thirty-five hours per month for children over 4.5 years). When we consider total hours of service, children who took the pretest and posttest received about twice as much service as children who only took the pretest.

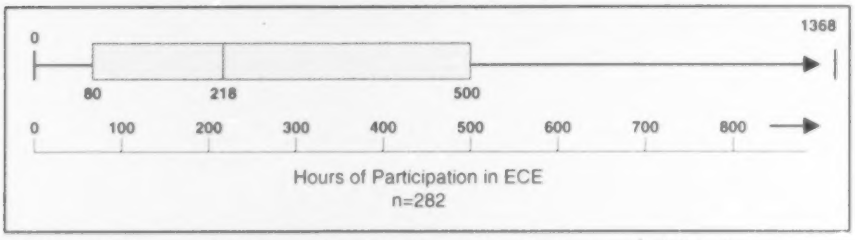
HOURS OF CORE SERVICE BETWEEN PRETEST AND POSTTEST

To make the testing process fit into the operations of Even Start projects, Sample Study projects were asked to administer pretests within one month of the start of service delivery and to administer the posttest as close to the end of the year as possible. This means that families could have participated in Even Start services before administration of the pretest as well as after administration of the posttest. The data presented above (in Exhibits 8.1 through 8.3) describe the total number of hours of core services that families received during each of the past two program years. However, for the purpose of searching for relationships between hours of service received and test score gains, we are interested only in the number of hours of service that were received **between** the pretest and the posttest. Thus, we excluded from the analyses reported below any hours received prior to the pretest or after the posttest.

Exhibits 8.4 through 8.6 summarize the total number of service hours that occurred between pretest and posttest for each core service area. These exhibits illustrate several interesting features. First, the range of hours is quite wide. In Exhibit 8.4, for example, half the children received under 218 hours of early childhood education between pretest and posttest over the course of the program year. This corresponds to approximately twenty-two hours a month, or between five and six hours/week, assuming that the hours are spread across a ten-month calendar. Twenty-five percent of the children received fewer than eighty hours (the bottom quartile of the distribution of hours of early childhood education),

and the top 25 percent of children participated in more than 500 hours of early childhood education.

Exhibit 8.4: Hours of Participation Between Pretest and Posttest for Early Childhood Education (Sample Study, 1995-96)

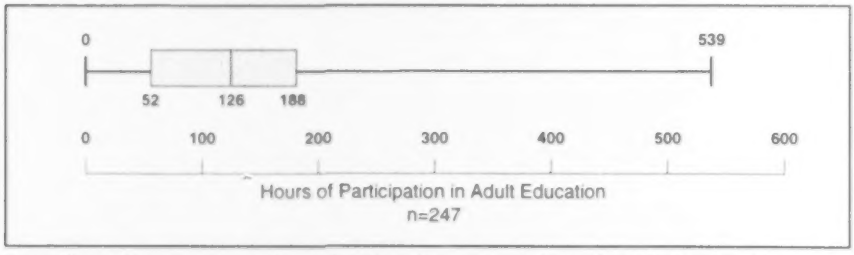


Note: The exhibit presents the total annual number of hours of participation in early childhood education. The box represents the middle 50 percent—from the 25th to the 75th percentile—of the distribution of hours. The lines to the left and right of the box represent the bottom and top quartiles, respectively, extending to the minimum (0) and maximum (1368) values. The line in the middle of the box represents the median value.

Exhibit reads: 25 percent of children who participated in early childhood education received between zero and eighty hours of services over the 1995-96 program year. Half of the children received more than 218 hours, and the top 25 percent received between 501 and 1,368 hours.

Exhibit 8.5 shows that half the adults received fewer than 126 hours of adult education between pretest and posttest over the course of the program year. This corresponds to approximately twelve hours a month, or about three hours a week, assuming a ten-month calendar. Twenty-five percent of the adults received fewer than fifty-two hours (the bottom quartile of the distribution) of adult education, and the top 25 percent of adults received more than 188 hours of adult education.

Exhibit 8.5: Hours of Participation Between Pretest and Posttest for Adult Education (Sample Study, 1995-96)



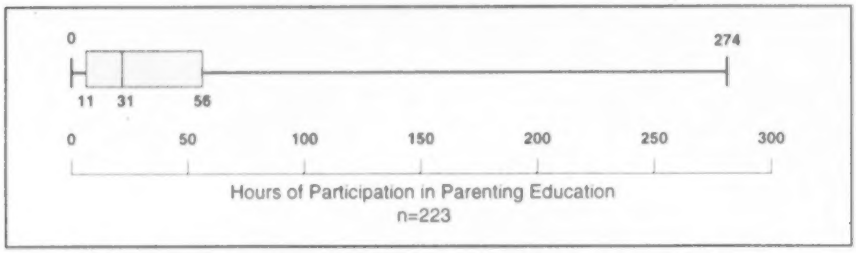
Note: The exhibit presents the total annual number of hours of participation in adult education. The box represents the middle 50 percent—from the 25th to the 75th percentile—of the distribution of hours. The lines to the left and right of the box represent the bottom and top quartiles, respectively, extending to the minimum (0) and maximum (539) values. The line in the middle of the box represents the median value.

Exhibit reads: 25 percent of parents who participated in adult education received between zero and fifty-two hours of services over the 1995-96 program year. Half of the parents received more than 126 hours, and the top 25 percent received between 189 and 539 hours.

The range of hours of participation in parenting education is shown in Exhibit 8.6. Half the adults received fewer than thirty-one hours of parenting education between pretest and posttest over the course of the program year. This corresponds to approximately three hours a month, assuming a ten-month

calendar. Twenty-five percent of the adults received fewer than eleven hours (the bottom quartile of the distribution of hours of parenting education), and the top 25 percent of adults received more than fifty-six hours.

Exhibit 8.6: Hours of Participation Between Pretest and Posttest for Parenting Education (Sample Study, 1995-96)



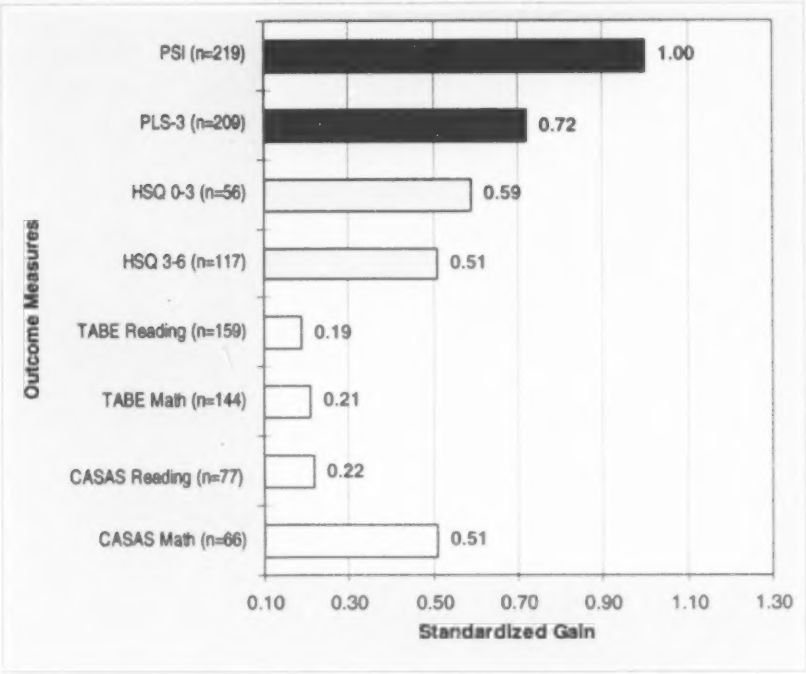
Note: The exhibit presents the total annual number of hours of participation in parenting education. The box represents the middle 50 percent—from the25th to the 75th percentile—of the distribution of hours. The lines to the left and right of the box represent the bottom and top quartiles, respectively, extending to the minimum (0) and maximum (274) values. The line in the middle of the box represents the median value.

Exhibit reads: 25 percent of parents who participated in parenting education received between zero and eleven hours of services over the 1995-96 program year. Half of the parents received more than thirty-one hours, and the top 25 percent received between fifty-seven and 274 hours.

GAINS ON OUTCOME MEASURES BY HOURS OF INSTRUCTION RECEIVED

A summary of the standardized gains achieved by Even Start families is presented in Exhibit 8.7, which shows that gains were achieved on all outcome measures. The gains on child measures were moderate to large for educational interventions—1.00 standard deviation units for the PSI and .72 standard deviation units for the PLS-3. Gains for parenting outcomes were moderate in size—.59 standard deviations for the HSQ for 0 to 3 year olds and .51 for the HSQ for 3 to 6 year olds. Finally, gains on outcomes for adults were smallest—about .20 standard deviations for the TABE reading and math tests and .22 and .51 standard deviations for the CASAS reading and math tests, respectively.

Exhibit 8.7: Standardized Gains on All Outcome Measures (Sample Study, 1995-96)



Note: The standardized gains displayed above reflect gain scores computed only for those participants who were pretested and posttested during the 1995-96 program year. As a result, the figure shown here may differ from figures presented earlier that include participant-level data from earlier program years.

Exhibit reads: The average child in the Even Start Sample Study gained 1.00 standard deviation units on the PSI during the 1995-96 program year.

We conducted several sets of analyses to determine whether the observed pretest-to-posttest gains on the child and parent outcome measures were related to the amount of service received by a child or parent. The amount of instruction is a significant predictor of gains only for one measure: the TABE math test. For adults whose pretest scores were low, the estimated gain scores were greater than for adults with higher pretest scores, as illustrated in Exhibit 8.8. This is consistent with research on progress in adult basic education, which indicates that the gains in academic performance, particularly reading ability, come very slowly, and that even after 100-120 hours of instruction in a program year, adults in ABE programs progress only about one year (Mikulecky and Lloyd, 1993). Since half the Even Start adults participated in fewer than 126 hours over a program year, it is not surprising that we do not yet observe a significant relationship between the amount of time in instruction and gain scores. For none of the other measures was there a significant relationship between the amount of instruction and changes from pretest to posttest.

Exhibit 8.8: TABE Math: Pretest-to-Posttest Gains, by Hours of Services and Pretest Level (Sample Study, 1995-96)

Percentile Equivalent (Hours of Service) Predicted Posttest (Predicted Gain)	Pretest Score Percentile Equivalent 671 - 25th Percentile	739 - 50th Percentile	769 - 75th Percentile
No service (0 hours)			
Predicted posttest	682.6	754.2	785.4
(Predicted gain)	(11.6)	(15.2)	(16.4)
25th Percentile (52 hours)			
Predicted posttest	689.1	754.9	784.0
(Predicted gain)	(18.1)	(15.9)	(15.0)
50th Percentile (126 hours)			
Predicted posttest	696.6	756.8	782.9
(Predicted gain)	(25.6)	(17.8)	(14.0)
75th Percentile (188 hours)			
Predicted posttest-	702.6	758.3	782.7
(Predicted gain)	(31.6)	(19.3)	(14.0)

Note: Based on TABE estimates of adult basic education enrollees, a pretest score of 671, which is equivalent to the twenty-fifth percentile of the TABE math test, corresponds to a grade level of approximately 3.7. A score of 739 (50th percentile) and 769 (75th percentile) correspond to grade levels of approximately 6.5 and 8.3, respectively.

Exhibit reads: Based on the pretest scores, an individual who scored at the twenty-fifth percentile on the pretest and who participated in fifty-two hours of adult education (equivalent to approximately the 25th percentile of number of adult education hours) would gain an estimated 18.1 points from the pretest to the posttest. An individual with the same pretest score who participated in 188 hours of adult education (equivalent to the 75th percentile of adult education hours) would gain an estimated 31.6 points.

It is unclear why we find positive relationships for adults on math—and only for one of the two math measures—but not on reading. We do see larger gains on math than on reading—perhaps it simply is easier to change math scores than reading scores, or perhaps the math instruction delivered through most Even Start projects is more directly linked to the items on the math tests.

The findings from the 1995-96 program year are quite different from findings in the 1994-95 program year, as well as from the earlier evaluation, where we did observe significant relationships between the amount of service received and gains on outcome measures for both adults and children. The reasons for the change in findings are unclear and deserve further attention. Another difference between current (1995-1996 program year) findings and the first evaluation is that there were no observed relationships between the amount of parenting education and gains on the child measures (e.g., the PSI and the PLS-3). This is discouraging because we had observed such relationships in the first national evaluation and had hoped to be able to replicate that finding in the current evaluation.

We expect that the causal chain implied by this analysis (provide services --> which change parents --> who then alter their behaviors --> producing subsequent changes in children) takes a fair amount of time to occur. The positive findings from the first evaluation were based on data collected over a two-year period. Most Sample Study participants remained in the Even Start

program only long enough to complete a pretest and one posttest, and only a small fraction (approximately 7 percent of those participants with valid pretest and posttest scores) remained in the program long enough to complete a second posttest. Consequently, we have not been able to analyze longer-term change and replicate the data set we had in the first study (pretest, posttest nine months later, and followup data nine months after the posttest).

GAINS ON OUTCOME MEASURES BY FAMILY NEED INDEX

In Chapter 6 of this report, we described the Even Start population in terms of an index of family need. The need index ranges from zero to seven and is based upon the following indicators (with each indicator assigned a value of one if present): low income (i.e., family income below $12,000); receipt of government assistance as the primary source of income and/or presence of one participating adult in receipt of government assistance; limited educational experience (i.e., families in which one participating parent had a 9th-grade or less education); limited English language proficiency (i.e., families in which at least one participating parent spoke a language other than English at home and had difficulty reading, speaking, and understanding English); single-parent family status; four or more children under the age of 16; and families in which at least one participating child had a disability.

We used the need index as a predictor for each of the outcome measures examined in this chapter; none is statistically significant. We explored several other avenues for examining differences in gain scores by level of need and found no significant differences. However, the small number of families for whom we have valid (1995-96) pretest and posttest data means that we have relatively low statistical power to detect significant differences. The fact that we observed no significant relationship between family need and test gains for participants in the 1995-96 program year is somewhat surprising since we did observe such relationships in the 1994-95 data.

HOW DID OUTCOMES VARY BY PROJECT CHARACTERISTICS?

In this section we examine the extent to which there are statistically significant relationships between outcomes for children and parents and project characteristics such as staffing, size, and funding. Each of the analyses reported was based on a simple regression model in which the posttest value of a given outcome variable was predicted from the pretest value of that variable and the project characteristic in question. We used simple regression models because we first wanted to learn whether the individual predictors were associated with individual level outcomes. Because we did not begin these analyses with a theory or hypothesis about where we might find such relationships, we sought to explore the data first.

STAFF CHARACTERISTICS

We used four measures of the size and quality of a project's staff: (1) the number of staff in the project; (2) the percentage of instructors with a bachelor's degree or higher; (3) the percentage of instructors with five or more years of experience; and (4) the number of staff per family in the project. Two modest conclusions can be drawn from the data. First, there is some evidence that families in projects with fewer staff members (smaller projects) did somewhat better than families in projects with more staff members. In particular, adults had larger gains on the TABE math test and children had larger gains on the PSI when they were in projects with fewer total staff members. Also, adults had larger gains on both the TABE math and reading tests when they were in projects that had fewer staff members per family.

A second conclusion is that the education level of staff seems to have a positive effect on posttest scores. Specifically, adults in projects with a high percentage of staff who had a bachelor's degree or more had larger gains on the CASAS math test. The same holds for children's scores on the PSI and families' scores on the HSQ—larger gains were achieved in projects that had a more highly-educated staff. On the other hand, the percentage of staff with five or more years of experience is negatively related to gains on the PSI and PLS-3.

Taken together, these findings suggest that individual outcomes for Even Start families are somewhat better in relatively small projects with well-trained staff with fewer years of experience. These are findings that were not apparent in the data for the 1994-95 project year, so we should be careful about the amount of confidence we place in them.

PROJECT SIZE

We examined the relationship between posttest scores and four measures of project size: (1) the number of families served at the project level; (2) the number of families served at the site level; (3) the total dollar amount of the project's grant; and (4) the amount of grant funds per family in the project.

There seems to be a relationship between project size and child outcomes but not between project size and adult or family outcomes. Similar to the findings from the 1994-95 year, the data show that children had larger gains on the PLS-3 and PSI when they were in projects that served a smaller number of families and which had more grant funds per family. However, these relationships do not hold for adult or family outcomes. This finding matches the data on staffing, which suggest that smaller projects (in terms of number of staff) had better outcomes.

SERVICE CHARACTERISTICS

We looked at several project-level indicators of service delivery: (1) the total number of hours per year of services offered (as distinct from the number of hours of services received) in early childhood education, parenting education, and adult education; (2) the total hours offered per year of home-based service in each of the three core components; (3) the percentage of services that were home-based in each of the three core components; (4) whether child care was available to most or all families; and (5) whether transportation to services was available to most or all families.

Significant relationships were found for several outcome measures when predicting outcomes on the basis of such service delivery characteristics as number of home-based hours of instruction. However, these findings disappeared when controlling for family need as well. For the children's measures, larger gains on both the PSI and PLS-3 were associated with fewer home-based hours per month and smaller percentages of home-based early childhood education. These findings suggest that children enrolled in projects that emphasized home-based instruction gained less in preschool readiness and language skills than children in projects that emphasized center-based programs (similar to what was found in the analysis of the 1994-95 data). However, these findings do not hold up when we control for the level of family need. Neither the PSI nor the PLS-3 posttest scores had a strong relationship to the total hours of services provided.

For the adult education measures, lower posttest scores on the TABE reading and math scales were associated with a higher percentage of hours in home-based instruction—the same relationship seen for PSI and PLS-3 scores for children. These findings should be interpreted with caution because similar results were not seen for the CASAS.

There was no relationship between the provision of child care/transportation and posttest scores for adults, children, or families. This is different from the findings based on 1994-95 data, where we reported that posttest scores for children were negatively related to the provision of child care and transportation. The lack of consistency in the data across years suggests that it is unlikely that there are important direct relationships between these support services and program outcomes. It is possible that child care or transportation have an indirect effect on outcomes by, for example, allowing mothers to participate more fully in core services, but that effect would not be apparent in these analyses.

For family outcomes, data from 1995-96 substantiate findings from the 1994-95 data. Posttest scores on the HOME Screening Questionnaire (HSQ) for parents of children ages 3 to 6 were positively related to the total hours of parent-child activities offered by projects. What is interesting is that there was no relationship between the HSQ and the hours of parenting education provided to parents alone. While this finding should be interpreted with caution, it does suggest that activities where the parents and children are together have more

transference to the home environment and to parent-child relationships than parenting information presented to parents alone.

CHAPTER 9: WHAT RESOURCES SUPPORT THE EVEN START SERVICES?

In Chapter 3, we described the Even Start participants in terms of their diverse backgrounds and educational needs. In Chapter 4, we examined the various educational and support services provided by projects to serve their families' needs. In this chapter, we return to the Even Start projects to examine the resources that support projects' implementation of their programs as well as the major challenges that they must overcome along the way. Although Even Start imposes few legal requirements concerning program operations, projects are expected to implement a complex set of service design and delivery approaches including integration across three educational components; provision of support services; interagency collaboration; and serving families most in need of Even Start services.

In this chapter, we describe the resources and activities that support the Even Start program operations, including:

- Administrative and organizational contexts;
- Sources of funding;
- Staffing patterns;
- Inservice training;
- Interagency collaboration;
- Barriers to program implementation and their solutions;
- Technical assistance needs; and
- Evaluation activities and future plans for continuation.

WHAT ORGANIZATIONS OPERATE THE EVEN START PROGRAM?

For program years 1991-92 through 1994-95, the law required that Even Start projects be operated by a local education agency (LEA) in collaboration with a community-based organization (CBO) or other non-profit agency or by a CBO or other non-profit agency in collaboration with an LEA. Beginning in 1995-96, the 1994 reauthorization requires that the relationship between the collaborators be a formal "partnership."

Since 1992, approximately 80 percent of the LEAs sponsoring Even Start have been public school districts. As shown in Exhibit 9.1, 82 percent of the Even Start projects that submitted national evaluation data for 1995-96 partnered with a single school district. The remaining LEAs that were partners in Even Start projects were school district cooperatives (4 percent), intermediate educational units (3 percent), or "other" organizational entities (10 percent).

Exhibit 9.1: Type of Local Education Agency (LEA) Partners for Even Start Projects (1995-96)

Local Education Agency (LEA)	Number of Projects	Percent of Projects
Single school district	431	82%
Cooperative of school districts	23	4%
Intermediate educational unit (ESD, BOCES, ISD)	18	3%
Other	54	10%
Total reporting	**526**	**100%**

Exhibit reads: In 1995-96, the LEA partners for 82 percent of Even Start projects were single school districts.

The types of organizations serving as Even Start partners with the LEAs have remained highly stable since 1992-93. One-quarter of all reporting projects had local, county, or state government agency partners (Exhibit 9.2). Postsecondary institutions and Head Start each were partners in 16 percent of projects. Preschool or day care programs, trade schools, and volunteer groups each served as partners for 3 percent of projects.[73]

Exhibit 9.2: Community-Based Organization Partners in Even Start Projects (1995-96)

Community-Based Organization	Number of Projects	Percent of Projects
Local, county, or state government agency	124	25%
Community college, college, or university	80	16%
Head Start	78	16%
Trade or technical school	17	3%
Other preschool or day care program	15	3%
Volunteer group	14	3%
Library	12	2%
Foundation, professional association, fraternal organization	4	1%
Church, temple, mosque, or other religious group	3	1%
Tribal organization	2	<1%
Other community-based organization	144	29%
Total reporting	**493**	**100%**

Exhibit reads: In 1995-96, 25 percent of reporting Even Start projects had local, county, or state government agencies as partners.

[73] "Other" organizations listed as partners by 29 percent of projects, for the most part, were specific examples of the ten types already listed. Eleven percent of projects did not indicate a partner agency.

WHICH FUNDS SUPPORT THE EVEN START SERVICES?

Federal grants represent the primary funding source for the vast majority of Even Start projects. Since 1992, all grants except the federally administered set-aside grants have been administered by the states. In 1995-96, nine Migrant Education projects and nine American Indian tribal projects received these set-aside grants. The U.S. Department of Education also directly administered five statewide family literacy initiative grants and one grant to a family literacy project in a prison that houses women and their preschool-aged children.

Federal Even Start grants are awarded for up to four years, after which a project has the option of reapplying to the program. (Under the current law, recipients are limited to a maximum of eight years of funding.) In 1995-96, 84 percent of the reporting projects were operating under four-year grants (Exhibit 9.3). Eight percent of reporting projects had one-year grants; the remaining 8 percent were divided evenly between two- and three-year grants.

Exhibit 9.3: Length of Even Start Grants (1995-96)

Length of Grant	Number of Projects Reporting	Percent of Projects
Four years	462	84%
Three years	23	4%
Two years	21	4%
One year only	44	8%
Total reporting	**550**	**100%**

Exhibit reads: In 1995-96, 84 percent of projects were operating under four-year Even Start grants.

For projects receiving multi-year grants, the portion of the total budget supported by non-Even Start ("local") matching funds (including in-kind contributions) is expected to increase by at least 10 percent each year. The local share must constitute at least 40 percent of their annual operating budgets by year four. For projects that receive grants after the fourth year, the local cost share must be at least 50 percent.

Exhibit 9.4 shows the sources of funding for Even Start projects operating in 1995-96. The average amount of federal Even Start funds for the first year of projects' current grants was $173,159, almost $3,500 per project less than the amount reported in 1994-95. This may reflect, at least in part, the growing percentage of projects in their fifth or subsequent year that must obtain at least 50 percent of their budget through non-federal funding sources. In 1995-96, roughly 37 percent of projects met this description.

Based on data reported by 524 projects (91 percent of all projects in 1995-96), the average annual budget of Even Start projects in 1995-96 was $245,273, combining all available resources. This average budget was nearly $19,000 per project less than the previous program year.

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However, as was the case in 1994-95, some projects had budgets that were substantially larger than the average amount.[74]

Exhibit 9.4: Levels of Funding for Even Start Projects (1995-96)

	Number of Projects Reporting	Average per Project	Range in 95% of Reporting Projects
Federal funding, first year of current grant	523	$173,159	$75,000-$500,000
1995-96			
Federal Even Start funds	476	$163,712	$42,196-$472,614
Non Even Start federal funds	315	$13,789	$0-$160,000
Local contributions	483	$108,718	$108-$502,058
Total resources	524	$245,273	$72,200-$681,727

Note: Different numbers of projects reported dollar figures for federal and local shares; as a result, the amounts displayed in each row do not sum to the total resources listed.

Exhibit reads: In 1995-96, the average amount of federal Even Start grants in the first year of current grant was $173,159 per project.

Exhibit 9.5 compares the Even Start program funds spent per family for 1993-94, 1994-95, and 1995-96. While the discussion above focused on resources available for each project, the per-family cost is based on the total program budget from all sources across all projects divided by the total number of families participating in all projects nationwide. With all types of funds combined (federal, state, and local), the amount that projects spent per family increased across the three program years, from $3,709 in 1993-94 to $4,438 in 1995-96, an average increase of $729 per family. However, focusing only on the

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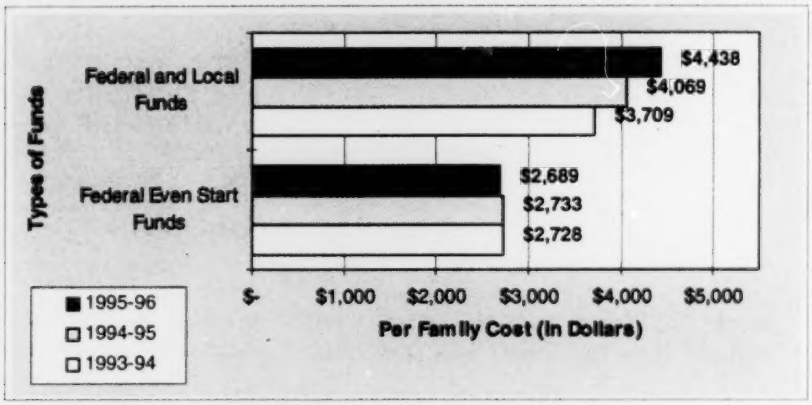
[74] Based on data from 476 projects (83 percent of all projects that operated in 1995-96), the average federal Even Start funds per project in 1995-96 was $163,712, nearly $10,000 less than the previous program year average (i.e., $173,586). Based on 483 reporting projects (84 percent), the average project in 1995-96 received $108,718 in local contributions, $21,557 greater than the 1994-95 average of $87,161. In addition, 315 projects also reported using other federal funds (e.g., Title I funds) averaging $13,789 per project as part of their local cost share for Even Start services.

These averages are based on different numbers of projects reporting less than complete data. Further, the 1994-95 evaluation did not collect information on any federal funds projects received in addition to Even Start grant. Thus, the average increases and decreases in funds from different sources do not add to the average change in total resources from 1994-95 to 1995-96, and these data need to be interpreted with caution.

For the final report of this evaluation, further analyses will be conducted to explore how changes in funding levels may affect Even Start services.

federal share, the dollar amount spent per family has remained stable across the three years.[75]

Exhibit 9.5: Even Start Program Funds per Family per Year (1993-94, 1994-95, and 1995-96)



Note: In this exhibit, the federal funds refer to federal Even Start funds only.

Exhibit reads: The federal Even Start funds averaged $2,689 per family in 1995-96.

Thus, while the average *per-project* budget may have decreased somewhat, the resources spent for each family *across the program* increased. These results may reflect, in part, a slight reduction in the average number of families served per project (from sixty in 1994-95 to fifty-five in 1995-96) and an apparent increase in the amount of local contributions. Conversations with local project directors suggest that, in order to increase program effectiveness, many projects are devoting greater efforts and resources per family rather than increasing the number of program enrollees. As mentioned earlier, the increase in the local contributions may be due in part to a larger number of projects receiving the fifth and subsequent year grants and supporting at least 50 percent of their budget with "local" matching funds.

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[75] The "average federal cost per family" can be calculated by two methods, depending on the type of information needed. The first method is to calculate the per-family federal cost for each project first and then to average the per-family costs from all projects. This method gives an equal weight to each project in calculating the programwide average, disregarding the fact that some projects with a large number of families may operate their programs at a lower per-family cost and smaller projects may spend more than the average per-family cost. However, the benefit of this method is that it allows for comparing the differences in per-family federal cost among the projects.

The second method is to add the federal funds across all projects (total federal share), add the number of families served across all projects (total families), and divide the total federal share by the total number of families. The programwide per-family cost derived through this method takes into account the variations among projects. This is the method used to assess how the total federal funds across all projects are spent per family programwide in both previous Even Start evaluation reports and this report.

How Are the Even Start Services Staffed?

The staff composition of Even Start projects has not changed appreciably since 1994-95. The average Even Start project in 1995-96 was staffed by ten persons: one administrator, three to four instructors, one to two instructional aides, one family specialist, one support service provider, one evaluator, and one "other" staffer (Exhibit 9.6). However, staffing patterns varied greatly across projects, ranging from no staff members paid with Even Start funds to eighteen staff members paid by Even Start.

Exhibit 9.6: Number of Even Start Paid Staff and Their Assignments (1995-96)[76]

Staff	Average Across All Projects	Range in 90% of Projects
Administrator	1.1	0-2
Instructor	3.6	0-8
Aide	1.7	0-5
Family specialist	1.3	0-4
Support service provider	1.0	0-3
Evaluator	0.7	0-1
Other	0.7	0-2
Total	10.1	0-18

Note: This exhibit includes staff who were paid either totally or partially with Even Start funds. The numbers do not include staff who were paid solely with local matching or collaborating agency funds. Staff with several roles were counted only once under their primary assignments.

Exhibit reads: The average number of administrators paid by federal Even Start funds was 1.1 per project in 1995-96.

As Exhibit 9.7 shows, Even Start funds supported, on average, about two instructors for each of the three core instructional areas, although some projects had four or more Even Start paid instructors per area.

Most Even Start projects supplemented their paid instructional staff with volunteers. The typical Even Start project had six to seven volunteers: two in adult education; one in parenting education; and four in early childhood education (Exhibit 9.7). Some projects had as many as 17 or more volunteers, while others had none.

In the area of early childhood education, the typical Even Start project had nearly four volunteers (3.8 average) and two paid instructors (2.3 average). This indicates that projects allocated more of their own staff resources to this area than to adult and parenting education services. As discussed in Chapter 4, educational programs for children under 3 years of age tended to be scarce in

[76] In many Even Start projects, individual staff members perform multiple roles and functions. To avoid duplicating staff counts, project directors were asked to count each Even Start staff member only once, in his or her primary assignment area.

many Even Start communities. This places a greater responsibility on Even Start projects to provide staff resources for their infant and toddler programs.

Exhibit 9.7: Number of Even Start Paid Instructors and Volunteers, by Instructional Area (1995-96)

Instructional Area	Instructors		Volunteers	
	Average	In 90% of Projects	Average	In 90% of Projects
Adult Education	1.9	0-5	2.1	0-5
Parenting Education	1.9	0-4	1.3	0-4
Early Childhood Education	2.3	0-5	3.8	0-10
Total	3.6	0-8	6.5	0-17

Note: The total is less than the sum of staff in three instructional areas because instructors and volunteers could be counted in all areas they teach but only once in the total.

Exhibit reads: On average, Even Start projects had 1.9 adult education instructors who were paid by federal Even Start funds in 1995-96.

Project directors were asked to report the qualifications of their instructional staff in terms of their highest level of education completed and years of related work experience. In 1995-96, 52 percent of Even Start paid instructors had a bachelor's degree, and 25 percent had a master's degree (Exhibit 9.8). Among the other instructors, 13 percent had a high school diploma, and 8 percent had an associate's degree. These percentages are virtually identical to those reported in 1994-95, indicating overall that Even Start projects continue to be staffed by well-qualified instructors.

Exhibit 9.8: Academic Degrees and Years of Experience of Even Start Instructors and Aides (1995-96)

	Percent of Instructors	Percent of Aides
Highest Level of Education Completed		
Did not receive HS diploma or GED	1%	6%
High school diploma or GED	13%	69%
AA	8%	15%
BA/BS	52%	9%
MA/MS/MEd	25%	1%
PhD/EdD	1%	0%
Special certification or endorsements (including CDA) relevant to Even Start instruction	32%	20%
Years of Experience		
Less than 1 year	7%	20%
1-5 years	42%	58%
6-10 years	24%	13%
More than 10 years	27%	9%

Note: The percentages represent the percentages of staff in each category, averaged across 563 projects in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 1 percent of instructors who were paid by Even Start funds had not completed high school or earned a GED.

The largest group of aides (69 percent) was educated at the high school level, including those who had received a GED. Fifteen percent of aides had earned an associate's degree, and 9 percent had earned a bachelor's degree. In addition to their academic degrees, 32 percent of Even Start instructors and 20 percent of aides had received special teaching certifications or endorsements, including the Child Development Associates' (CDA) certificate. Among aides, this represented a five-point increase from the 1994-95 level of 15 percent.

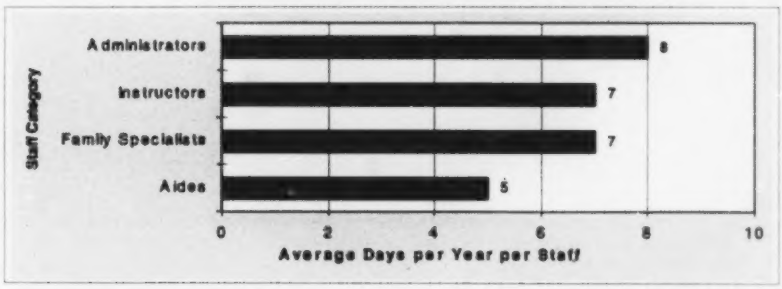
As one might expect, teachers tended to have more years of relevant professional experience than aides. For example, 27 percent of Even Start teachers had more than ten years of professional experience, as opposed to 9 percent of aides. However, for both teachers and aides, the largest category was one to five years of teaching experience (42 percent and 58 percent, respectively), mirroring the work history pattern reported in 1994-95.

WHAT INSERVICE TRAINING DO EVEN START STAFF RECEIVE?

Even Start projects are required to provide inservice training to build upon their staff's previous education and work experience. Exhibit 9.9 depicts the average number of hours of inservice training, by job category, that Even Start staff received in 1995-96.

Even Start administrators in 1995-96 received an average of eight days of inservice training; instructors and family specialists each received an average of seven inservice days, and aides received an average of five inservice days.

Exhibit 9.9: Average Days of Inservice Training During Program Year per Staff, by Staff Category (1995-96)



Note: This analysis was based on data from 563 projects included in the 1995-96 evaluation.

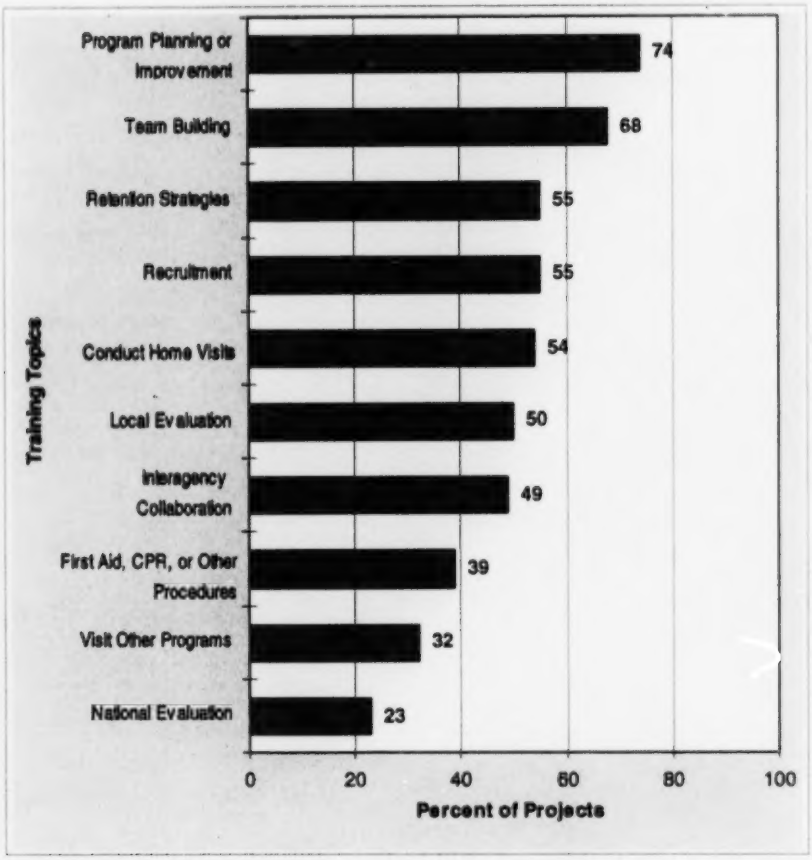
Exhibit reads: On average, Even Start administrators received eight days of inservice training in 1995-96.

PROGRAM COORDINATION

The inservice training that Even Start projects provided to most of their staff covered a wide range of topics that pertain to program coordination (Exhibit 9.10). Continuing the same pattern from the previous two years, in 1995-96

almost three-quarters of projects (74 percent) provided most of their staff with training in program planning or improvement, and 68 percent provided training in team building. In 50 percent to 55 percent of projects, most staff also received inservice training in recruitment, retention, home visits, and the local evaluation.

Exhibit 9.10: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Program Coordination (1995-96)



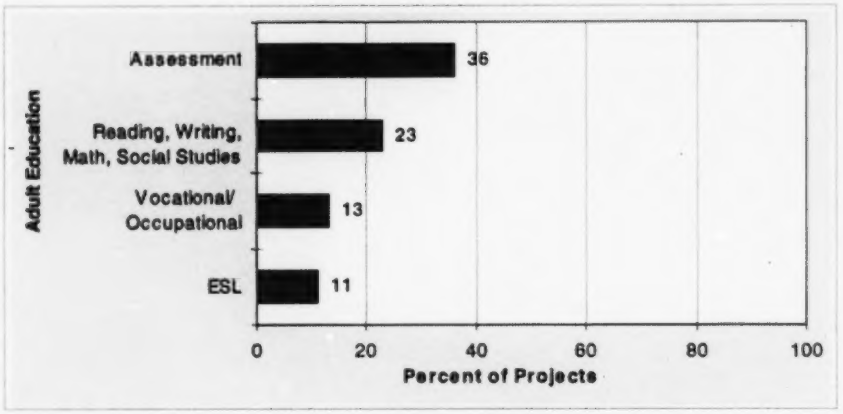
Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 74 percent of Even Start projects provided inservice training on program planning or improvement to most of their staff.

CORE EDUCATIONAL SERVICES

Exhibits 9.11 through 9.13 display the percentages of projects that reported providing inservice training to "most" of their staff in each of the three core educational areas. Relatively few Even Start projects (11 percent to 36 percent) provided inservice training in adult education to a majority of staff members. Of these, training in adult assessment was the most common, taught to most staff in 36 percent of projects (Exhibit 9.11).

Exhibit 9.11: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Adult Education (1995-96)

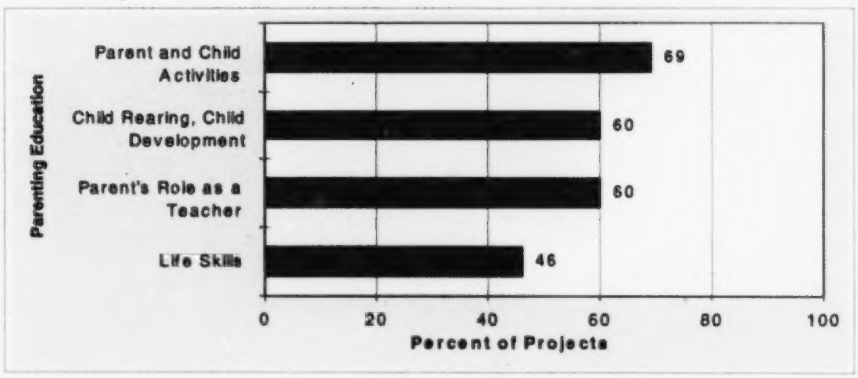


Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 36 percent of Even Start projects provided inservice training on adult assessment to most of their staff.

Between 46 percent and 69 percent of projects provided most of their staff with inservice training in the four parenting education topic areas: parent and child activities; child rearing and child development; parent's role as a teacher; and life skills (Exhibit 9.12). The most common topic, addressed by 69 percent of projects, was parent and child joint activities.

Exhibit 9.12: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Parenting Education (1995-96)



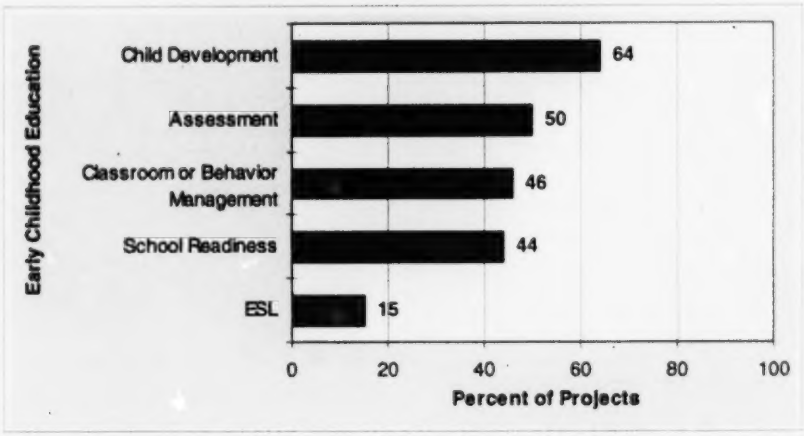
Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 69 percent of Even Start projects provided inservice training on parent and child activities to most of their staff.

About one-half to two-thirds of projects provided inservice training to most of their staff in four topic areas related to early childhood education: child development; conducting child assessment; classroom or behavior management;

and school readiness (Exhibit 9.13). English-as-a-second language training was provided to most staff only in 15 percent of projects.

Exhibit 9.13: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Early Childhood Education (1995-96)



Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

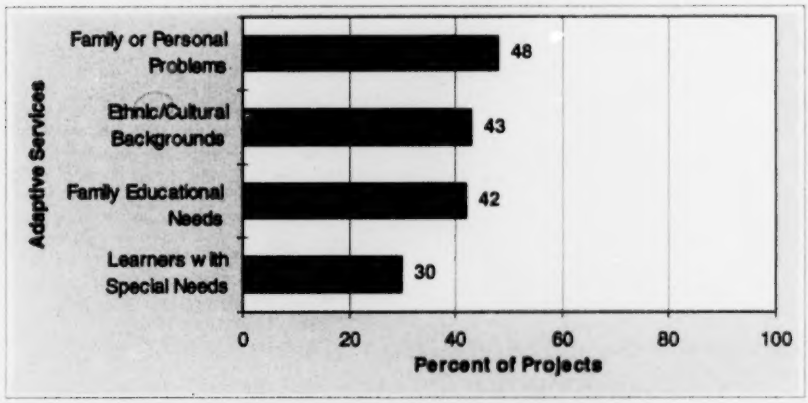
Exhibit reads: In 1995-96, 64 percent of Even Start projects provided inservice training on child development topics to most of their staff.

The greater emphasis placed on training Even Start staff on parenting and early childhood education topics, compared to adult education topics, may reflect:

- The relative scarcity of other (non-Even Start) programs in the community providing family literacy, parenting education, and services for very young children (see Chapter 4) and
- The relatively limited role of collaborating agencies in providing Even Start parenting education and services for infants and toddlers (see Exhibits 9.15 and 9.16).

Finally, as shown in Exhibit 9.14, approximately one-third to one-half of projects trained most of their staff on adapting their educational programs to participants' needs and circumstances. The specific topics included: participants' family or personal problems (48 percent); participants' racial/ethnic and cultural backgrounds (43 percent); family's educational needs (42 percent); and learners with special needs (30 percent).

Exhibit 9.14: Percent of Projects Providing Inservice Training for Most of Their Staff in Topics Related to Adapting Services (1995-96)



Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 48 percent of Even Start projects provided inservice training on adapting services to participants' family and personal problems to most of their staff.

OTHER INSERVICE TOPICS PRESENTED TO EVEN START STAFF

Ninety-seven projects, representing approximately 17 percent of all projects, reported that their staff had attended inservice sessions on topics other than those discussed above. Some additional inservice themes included technology-related topics such as computer, video, and Internet; health and safety issues, such as gang awareness and communicable diseases; and social problems of families, such as child abuse/neglect, substance abuse, single parenthood, and divorce.

TO WHAT EXTENT DO COLLABORATING AGENCIES PROVIDE THE CORE EDUCATIONAL SERVICES?

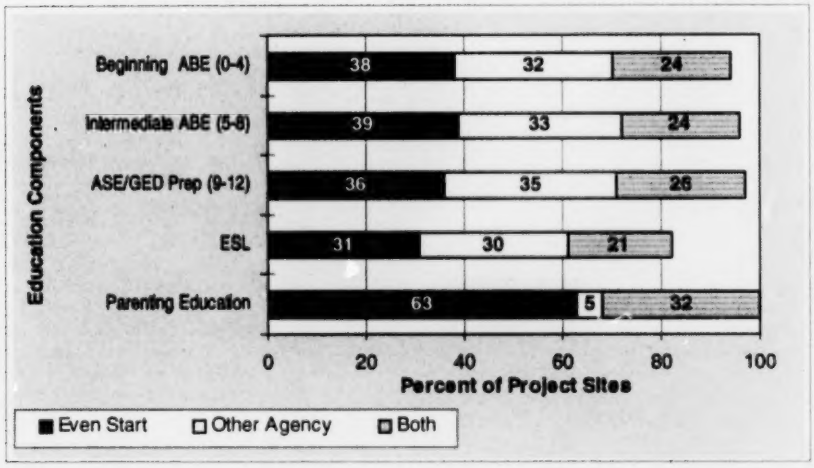
This section examines agencies taking the primary responsibility for delivering various components of Even Start educational services. Are the staff delivering Even Start services paid with Even Start funds, paid by agencies collaborating with Even Start, or paid by both sources?[77]

Projects generally allocated their Even Start staff resources in specific educational areas. As shown in Exhibit 9.15, for approximately one-third of project sites, collaborating agencies were solely responsible for educational

[77] Project instructors were considered as Even Start staff if any portion of their salaries was paid with Even Start funds.

services in all levels of adult education; both Even Start and collaborating agency staff shared responsibilities in about one-quarter of project sites. However, the pattern was quite different for parenting education. A majority (63 percent) of project sites relied solely on Even Start staff to deliver services in this domain.

Exhibit 9.15: Percent of Project Sites Coordinating Services With Collaborating Agencies: Adult and Parenting Education (1995-96)



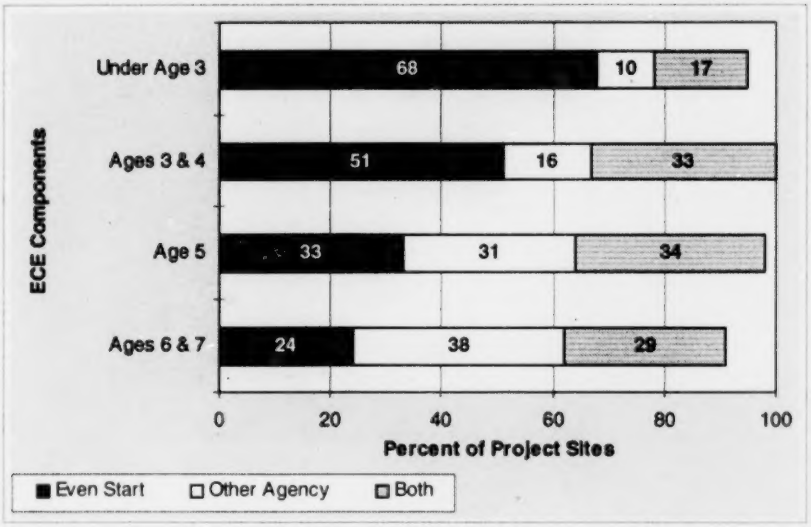
Note: The percentages are based on 635 project sites reported by 563 projects in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 38 percent of project sites used Even Start staff exclusively for their beginning adult basic education services.

Yet another pattern of interagency collaboration was reported for different levels of early childhood education. As shown in Exhibit 9.16, Even Start resources were used exclusively for serving infants and toddlers in 68 percent of project sites, while collaborating agencies played a greater role in serving older children. Thirty-eight percent of project sites relied upon a collaborating agency as the sole provider of Even Start educational services for 6- to 7-year-old children.

Interagency collaboration is one of the key elements strongly emphasized in the Even Start legislation, and projects are succeeding in developing a wide network of collaborative arrangements. While Even Start staff are responsible to varying degrees for the delivery of services in all educational components, in many communities a variety of agencies and organizations collaborate with Even Start projects—either as the primary provider of specific services or to augment services provided largely by Even Start projects.

Exhibit 9.16: Percent of Project Sites Coordinating Services With Collaborating Agencies: Early Childhood Education (ECE) (1995-96)



Note: The percentages are based on 635 project sites reported by 563 projects in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 68 percent of Even Start project sites reported that ECE instruction for children under age 3 was provided solely through Even Start.

Exhibit 9.17 shows the types of organizations that collaborate with Even Start projects to provide adult education services and the percentage of project sites that reported having collaborative arrangements with each type of organization as the primary or secondary service provider. Public school departments (other than the specific departments sponsoring Even Start) and colleges and universities served as primary providers of adult education services for 35 percent and 19 percent of project sites, respectively. For many project sites, Even Start was the primary source of instructional staff, supplemented by staff from agencies such as volunteer groups (51 percent of project sites), community groups (46 percent), and government agencies (37 percent).

Exhibit 9.17: Percent of Project Sites Where Collaborating Agencies Were the Primary or Secondary Providers of Adult Education Services (1995-96)

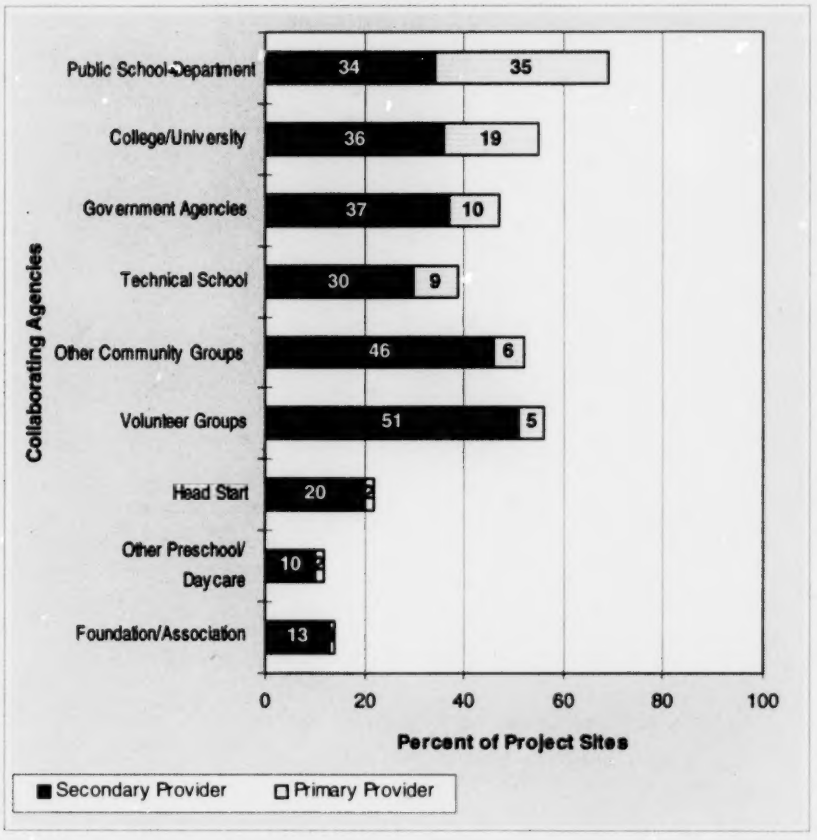


Exhibit reads: In 1995-96, departments in public school systems served as primary providers of adult education curricula for 35 percent of project sites.

As shown in Exhibit 9.18, relatively few collaborating agencies served as primary providers of parenting education, with the exception of public school departments (16 percent). However, various types of organizations contributed parenting education services as secondary providers. The largest group of secondary providers of parenting education was community groups (56 percent), followed by public school departments (51 percent), government agencies (51 percent), and Head Start (49 percent). Volunteer groups provided supplemental parenting education services to 41 percent of project sites.

Exhibit 9.18: Percent of Project Sites Where Collaborating Agencies Were the Primary or Secondary Providers of Parenting Education Services (1995-96)

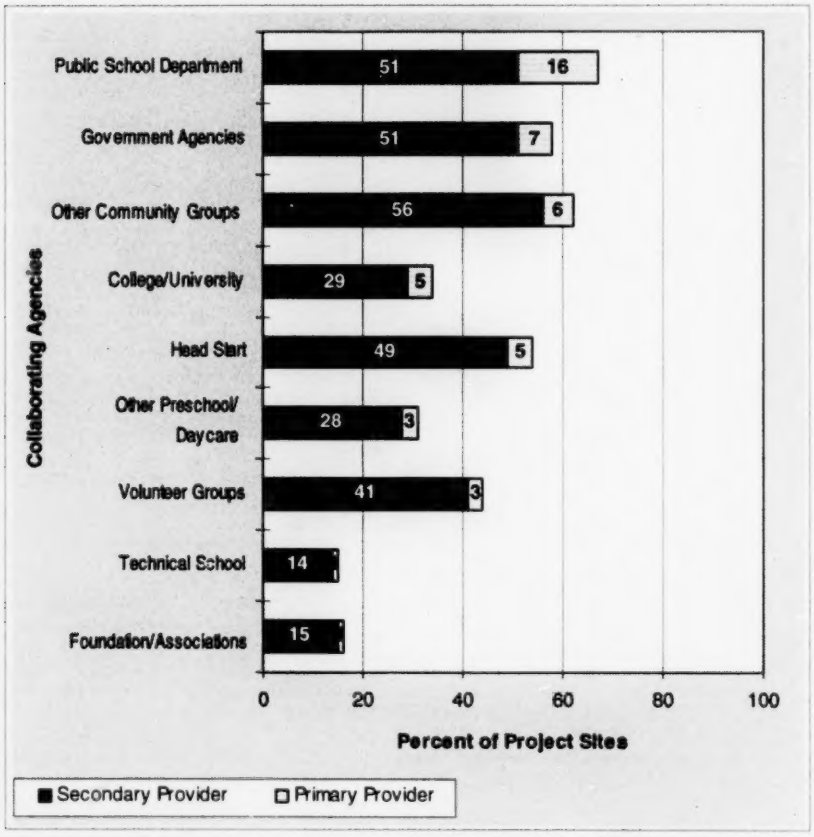


Exhibit reads: In 1995-96, departments in public school systems served as primary providers of parenting education curricula for 16 percent of project sites.

Early childhood education also was supported primarily with Even Start staff, although some projects relied on instructors from public school departments (34 percent), Head Start (24 percent), and other preschool and daycare programs (17 percent) as primary service providers (Exhibit 9.19). These three provider groups also represented the largest percentages of secondary providers of early childhood education, among which Head Start was the single largest secondary provider (53 percent).

Exhibit 9.19: Percent of Project Sites Where Collaborating Agencies Were the Primary or Secondary Providers of Early Childhood Education Services (1995-96)

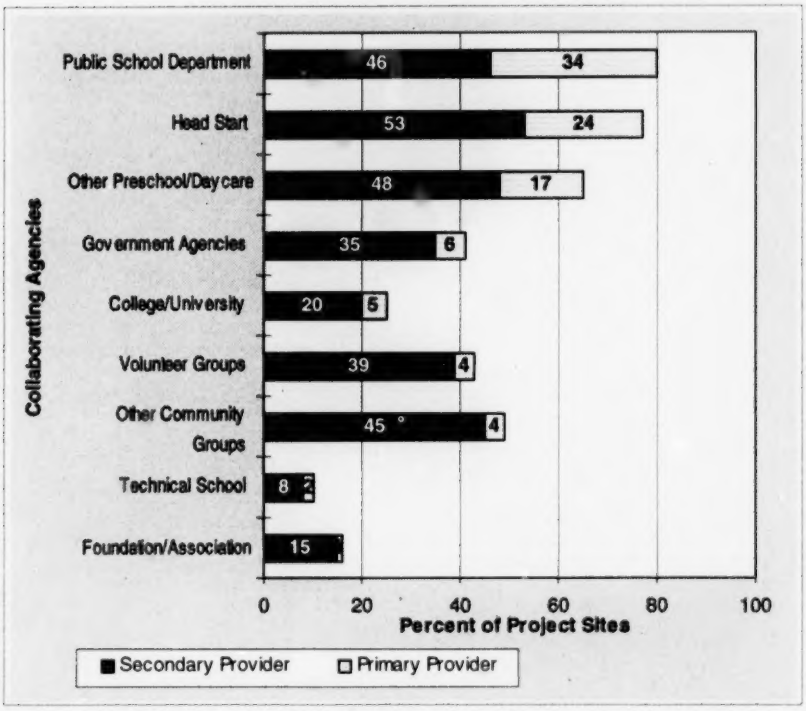


Exhibit reads: In 1995-96, departments in public school systems served as primary providers of early childhood education curricula for 34 percent of project sites.

Exhibit 9.20 describes the instructors of Even Start students in terms of the source of their salaries (Even Start, local matching funds, or collaborating agency) and in terms of the amount of contact they have with Even Start students (whether they work full-time or part-time; whether they teach Even Start students exclusively or both Even Start and other students).

As with most aspects of the Even Start program, projects varied widely in their configurations of various instructional resources. Typically, Even Start projects had three or four instructors who were paid by Even Start funds—working either full- or part-time and primarily teaching Even Start students (bottom row of Exhibit 9.20). On average, two instructors per project were paid by local matching funds, and another one to two instructors were paid by collaborating agencies. However, the number of instructors provided by local match and collaborating agencies varied substantially across all projects.

Exhibit 9.20: Number of Instructors, by Salary Source and Student Contact (1995-96)

Teaching Assignment	Paid by Even Start Funds Average (Range)	Paid by Local Match Average (Range)	Paid by Collaborating Agency Average (Range)
Full-time instructor, teaching mostly Even Start students	**1.6** **(0-14)**	**0.4** **(0-100)**	**0.1** **(0-7)**
Part-time instructor, teaching mostly Even Start students	1.7 (0-26)	0.5 (0-100)	0.3 (0-10)
Full-time instructor, teaching Even Start and other students	0.1 (0-8)	0.5 (0-54)	0.5 (0-30)
Part-time instructor, teaching Even Start and other students	0.2 (0-11)	0.6 (0-75)	0.6 (0-40)
Total	**3.7** **(0-26)**	**2.0** **(0-200)**	**1.6** **(0-45)**

Note: This analysis was based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, Even Start projects had an average of 1.6 full-time instructors (paid by Even Start funds) who taught mostly Even Start students.

Project directors' satisfaction ratings of their collaborative arrangements have remained consistently high since 1993-94. In 1995-96, nearly all project sites (97 percent) reported that "all" or "many" of their collaborating relationships were satisfactory (Exhibit 9.21).

Exhibit 9.21: Degree of Satisfaction with Collaborative Arrangements (1995-96)

	Number of Project Sites	Percent of Project Sites
All were satisfactory	261	43%
Many were satisfactory	326	54%
Few were satisfactory	15	3%
None were satisfactory	1	<1%

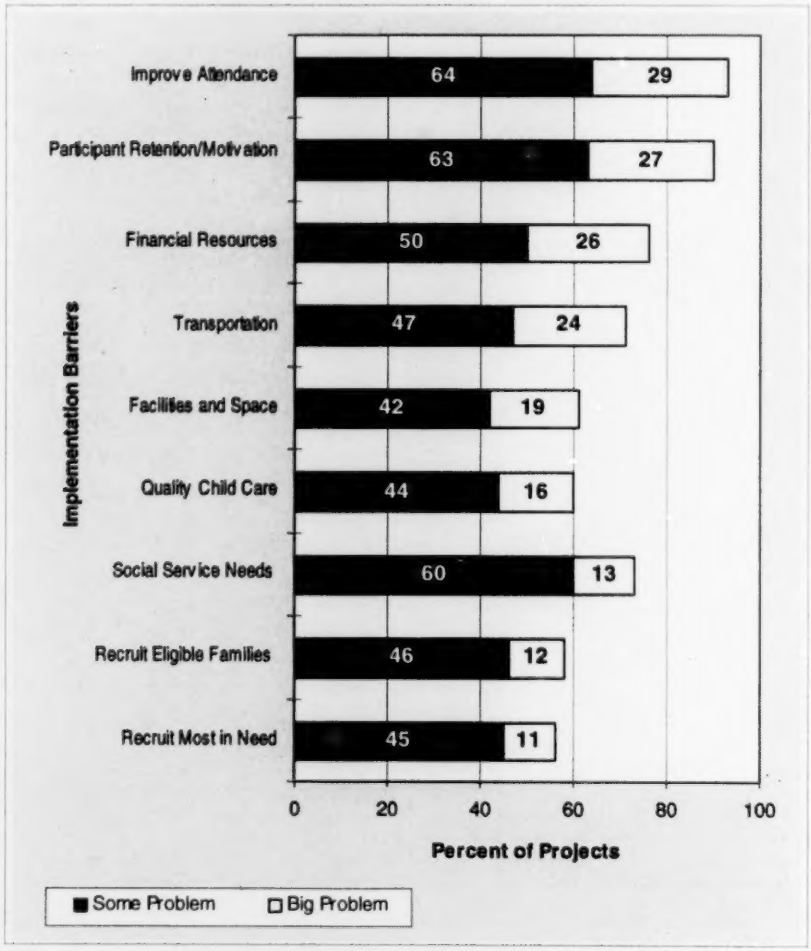
Exhibit reads: In 1995-96, 43 percent of Even Start project sites reported that all of their collaborative arrangements were satisfactory.

WHAT ARE MAJOR CHALLENGES IN IMPLEMENTING EVEN START?

Exhibit 9.22 displays a list of nine potential barriers to the successful implementation of Even Start programs and whether each presented a "big problem" or "some problem" to the projects. The following four issues were "big problems" for approximately one-quarter of projects: improving attendance (29 percent); improving participants' retention or motivation (27 percent); obtaining sufficient financial resources (26 percent); and obtaining adequate transportation (24 percent). These four issues were among the top five cited in 1994-95 and 1992-93 with generally consistent percentages across program years.

In addition, between 11 percent and 19 percent of projects experienced major difficulties in securing and maintaining adequate facilities and space; finding quality child care in the community; meeting participants' social service needs; recruiting eligible families; and recruiting families most in need of Even Start services.

Exhibit 9.22: Percent of Projects Reporting Barriers to Program Implementation (1995-96)



Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 29 percent of Even Start projects reported that improving attendance presented big problems in program implementation.

Fewer than 10 percent of project sites had "big problems" with regard to coordination with other agencies; finding local education services; meeting local evaluation requirements; complying with the federal regulations; working within the local model; or following state guidance (not shown in the exhibit). However, between 37 percent and 56 percent had some problems in these areas.

For each implementation barrier, we also asked the projects to report any solutions they had utilized. Exhibit B.8 in Appendix B lists the innovative and/or frequently mentioned solutions. Solutions offered by projects regarding the four major barriers are summarized in the following paragraphs:

- **Improving attendance.** Thirty-four percent of projects reported solutions that they had implemented to improve participants' attendance. These included offering families incentives such as field trips, family nights, and merchandise certificates; using letters, phone calls, and home visits to follow up on absences; providing transportation and child care to enable more parents to attend; and involving parents in planning activities.

- **Improving participants' retention and motivation.** Thirty-two percent of projects reported solutions to counteract poor retention and motivation among participants. There was considerable overlap with the solutions reported for improving attendance.

- **Obtaining sufficient financial resources.** Although securing sufficient financial resources was the third major problem cited, only 15 percent of projects reported solutions to this problem. Those that did report solutions in this area primarily wrote grants to obtain funds to supplement their Even Start grants and solicited monetary and in-kind contributions from local businesses and collaborative partners.

- **Transportation.** Twenty percent of projects reported solutions for coping with inadequate transportation. Solutions included subsidizing transportation costs for families with cars; purchasing or renting a van to transport families; using public transportation; arranging for families to ride public school buses; having staff use their own cars to transport families; and sharing vehicles and transportation costs with other programs.

WHAT ARE PROJECTS' TECHNICAL ASSISTANCE NEEDS?

In addition to reporting the barriers to implementation and any solutions that they had implemented, project directors were asked to describe the extent of their needs for technical assistance. Exhibits 9.23 and 9.24 report the percentages of projects that indicated some need or a great need for technical assistance in the areas of program operations and support services. Exhibit 9.25 reports percentages of projects that expressed technical assistance needs in the area of educational services.

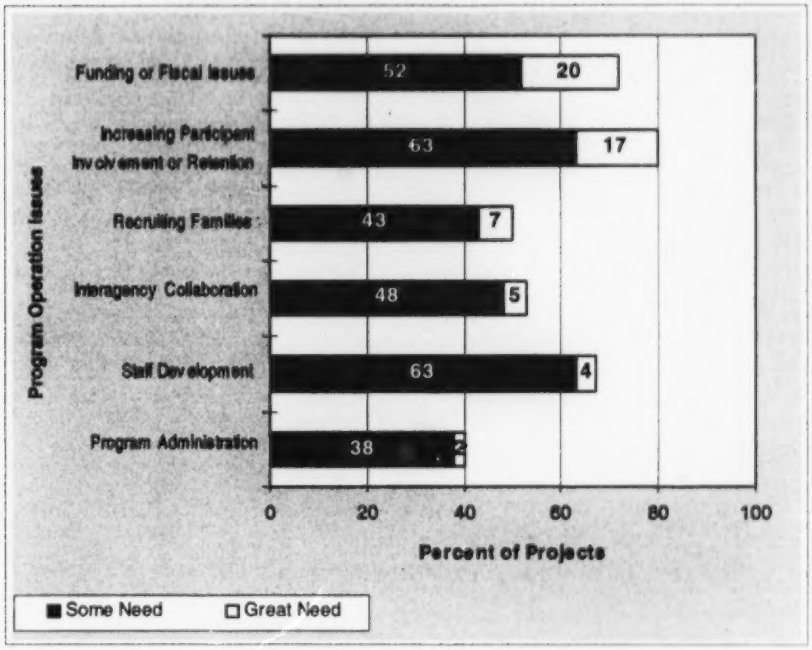
PROGRAM OPERATIONS

The two areas related to program operations for which the projects indicated a great need for technical assistance were funding or fiscal issues (20 percent) and increasing participant involvement or retention (17 percent). More than one-half of projects also experienced some need for technical assistance in the areas of

staff development, increasing participant involvement and retention, and funding.

Not coincidentally, these three areas were rated as "big problems" by a majority of project directors responding to challenges to program implementation. Funding and participant involvement/retention also were major areas for which projects in 1994-95 reported high levels of technical assistance needs.

Exhibit 9.23: Projects' Need for Technical Assistance: Program Operation Issues (1995-96)



Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

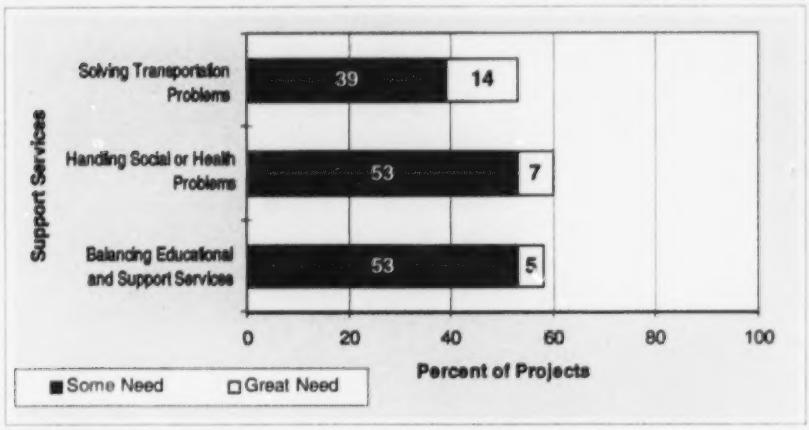
Exhibit reads: In 1995-96, 20 percent of Even Start projects indicated that they had great need for technical assistance in the area of funding.

SUPPORT SERVICES

In the area of support services, meeting the transportation needs of participants continued to be an issue for which projects needed a great deal of technical assistance (14 percent). However, this percentage reflects a 6-point decrease from the previous program year.

More than 50 percent of projects reported having some need for technical assistance in balancing program resources between educational and support services and in handling social or health problems of participants.

Exhibit 9.24: Projects' Need for Technical Assistance: Support Services (1995-96)



Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

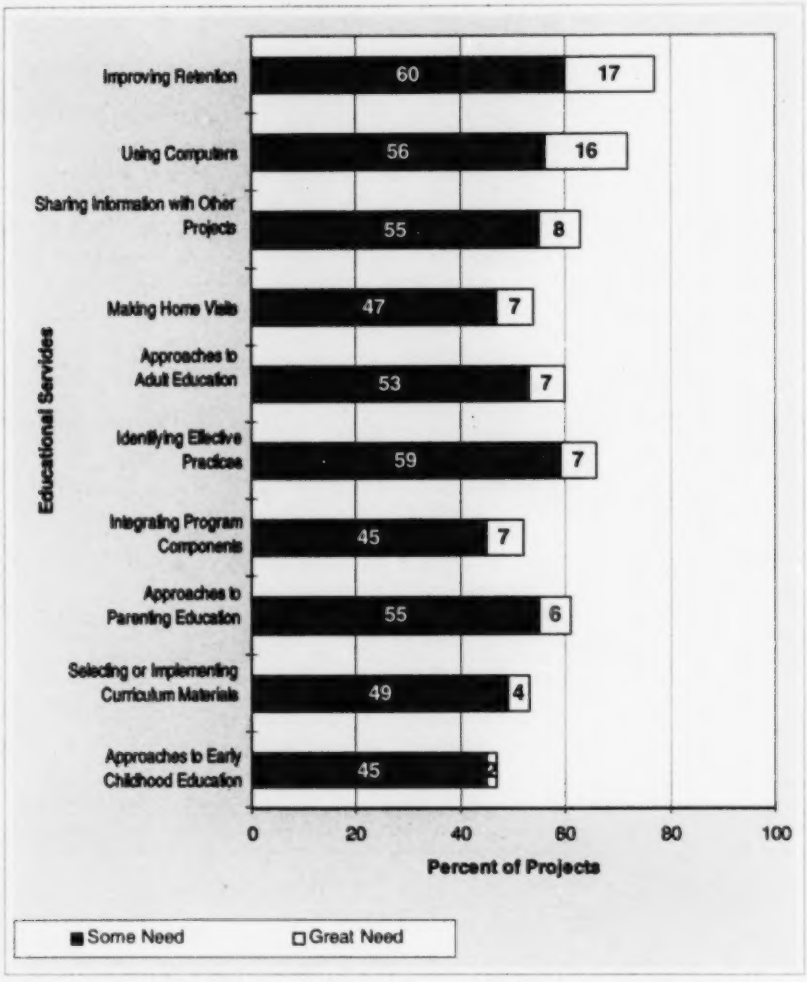
Exhibit reads: In 1995-96, 14 percent of Even Start projects indicated that they had a great need for technical assistance regarding transportation problems.

EDUCATIONAL SERVICES

In the context of educational services, improving participants' retention emerged once again as the area for which the largest percentage of projects (77 percent) reported at least some need for technical assistance (Exhibit 9.25). Computer assistance closely followed, cited as an area of at least some need by 72 percent of projects. Finally, about half of projects reported experiencing some need for assistance in areas such as approaches to adult, parenting, and early childhood education programs and sharing information with other projects.

In addition to the issues discussed above, other topics about which projects reported needing technical assistance were identifying appropriate assessment instruments; working with learning-disabled adults; retaining and helping families with incest or substance abuse problems; helping adults transition to the workforce; disseminating program models to newer Even Start grantees; forming collaborative relationships with other Even Start projects; and collecting qualitative assessment data.

Exhibit 9.25: Projects' Need for Technical Assistance: Educational Services (1995-96)



Note: The percentages are based on 563 projects included in the 1995-96 evaluation.

Exhibit reads: In 1995-96, 17 percent of Even Start projects indicated that they had a great need for technical assistance in the area of improving retention.

WHAT ARE PROJECTS' EVALUATION ACTIVITIES AND FUTURE PLANS?

The Even Start legislation requires each local project to participate in the national evaluation activities and arrange for a local evaluation of the project by an independent evaluator. Ninety-two percent of the 563 projects that submitted data to the national evaluation in 1995-96 reported conducting local evaluations. As was the case in 1994-95, nearly all local evaluations included assessment of participant growth in child and adult literacy and in parenting skills (94 percent); status of implementing their proposed program components (94 percent); detailed descriptions of their participants, program services, and interagency

collaborations (92 percent); and assessments of the quality of the educational and support services they provide (90 percent). Fewer projects (68 percent) evaluated the quality of their staff training and development.

Exhibit 9.26: Projects Conducting a Local Evaluation (1995-96)

Components Included in Local Evaluations	Percent of Projects
Assessment of how adequately or completely the proposed program components have been implemented	94%
Assessment of growth in child literacy, adult literacy, and parenting skills	94%
A detailed description of the participants, program services, and interagency collaborations	92%
Assessment of the quality of the educational and support services provided	90%
Assessment of the quality of staff training and development	68%

Note: The percentages are based on 517 projects reporting that they were conducting local evaluations in 1995-96.

Exhibit reads: In 1995-96, 94 percent of Even Start projects that were conducting local evaluations assessed the adequacy and completeness of implementing the proposed program components.

Ninety-one percent of Even Start projects planned to continue their programs after their current grant expires (see top of Exhibit 9.27). Among the 494 projects that planned to continue, 78 percent planned to reapply to Even Start for another demonstration grant; 57 percent planned to obtain funding from foundations, corporations, or other sources; and 50 percent planned to carry on with local funds.

Exhibit 9.27: Plans for Continuation After Current Multi-Year Grant Expires (1995-96)

	Number of Projects	Percent of Projects
Plan to continue	494	91%
Have no plans yet	47	9%
Plan to close the project	4	1%
Strategies for continuing the program		
Reapply for another Even Start demonstration grant	433	78%
Obtain funding from foundations, corporations, or other sources	318	57%
Carry on with local funds	279	50%
Other	60	11%

Note: Because projects could indicate more than one strategy, the percentages add to more than 100.

Exhibit reads: In 1995-96, 91 percent of Even Start projects planned to continue Even Start services after the current grant expires.

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APPENDIX A: EVEN START LEGISLATION

PART B—EVEN START FAMILY LITERACY PROGRAMS

SEC. 1201. STATEMENT OF PURPOSE.

It is the purpose of this part to help break the cycle of poverty and illiteracy by improving the educational opportunities of the Nation's low-income families by integrating early childhood education, adult literacy or adult basic education, and parenting education into a unified family literacy program, to be referred to as 'Even Start'.

The program shall—

(1) be implemented through cooperative projects that build on existing community resources to create a new range of services;

(2) promote achievement of the National Education Goals; and

(3) assist children and adults from low-income families to achieve to challenging State content standards and challenging State student performance standards.

SEC. 1202. PROGRAM AUTHORIZED.

(a) Reservation for Migrant Programs, Outlying Areas, and Indian Tribes.—

(1) In general.—For each fiscal year, the Secretary shall reserve 5 percent of the amount appropriated under section 1002(b) for programs, under such terms and conditions as the Secretary shall establish, that are consistent with the purpose of this part, and according to their relative needs, for—

(A) children of migratory workers;

(B) the outlying areas; and

(C) Indian tribes and tribal organizations.

(2) Special rule.—If the amount of funds made available under this subsection exceeds $4,600,000, the Secretary shall award a grant, on a competitive basis, of sufficient size and for a period of sufficient duration to demonstrate the effectiveness of a family literacy program in a prison that houses women and their preschool age children and that has the capability of developing a program of high quality.

(b) Reservation for Federal Activities.—From amounts appropriated under section 1002(b), the Secretary may reserve not more than three percent of such amounts or the amount reserved to carry out the activities described in paragraphs (1) and (2) of subsection (a) for the fiscal year 1994, whichever is greater, for purposes of—

(1) carrying out the evaluation required by section 1209; and

(2) providing, through grants or contracts with eligible organizations, technical assistance, program improvement, and replication activities.

(c) Reservation for Grants.—

(1) Grants authorized.—In any fiscal year in which the amount appropriated to carry out this part exceeds the amount appropriated to carry out this part for the preceding fiscal year, the Secretary may reserve such funds in excess of the amount appropriated for such preceding fiscal years as do not exceed $1,000,000 to award grants, on a competitive basis, to States to enable such States to plan and implement, statewide family literacy initiatives to coordinate and integrate existing Federal, State, and local literacy resources consistent with the purposes of this part. Such coordination and integration shall include funds available under the Adult Education Act, Head Start, Even Start, and the Family Support Act of 1988.

(2) Matching requirement.—The Secretary shall not make a grant to a State under paragraph (1) unless the State agrees that, with respect to the costs to be incurred by the eligible consortium in carrying out the activities for which the grant was awarded, the State will make available non-Federal contributions in an amount equal to not less than the Federal funds provided under the grant.

(d) State Allocation.—

(1) In general.—From amounts appropriated under section 1002(b) and not reserved under subsections (a), (b), and (c), the Secretary shall make grants to States from allocations under paragraph (2).

(2) Allocations.—Except as provided in paragraph (3), from the total amount available for allocation to States in any fiscal year, each State shall be eligible to receive a grant under paragraph (1) in an amount that bears the same ratio to such total amount as the amount allocated under part A to that State bears to the total amount allocated under that section to all the States.

(3) Minimum.—No State shall receive a grant under paragraph (1) in any fiscal year in an amount which is less than $250,000, or one-half of 1 percent of the amount appropriated under section 1002(b) and not reserved under subsections (a), (b), and (c) for such year, whichever is greater.

(e) Definitions.—For the purpose of this part—

(1) the term `eligible entity' means a partnership composed of both—

(A) a local educational agency; and

(B) a nonprofit community-based organization, a public agency other than a local educational agency, an institution of higher education, or a public or private nonprofit organization other than a local educational agency, of demonstrated quality;

(2) the term `eligible organization' means any public or private nonprofit organization with a record of providing effective services to family literacy providers, such as the National Center for Family Literacy, Parents as Teachers, Inc., the Home Instruction Program for Preschool Youngsters, and the Home and School Institute, Inc.;

(3) the terms `Indian tribe' and `tribal organization' have the meanings given such terms in section 4 of the Indian Self-Determination and Education Assistance Act; and

(4) the term `State' includes each of the 50 States, the District of Columbia, and the Commonwealth of Puerto Rico.

SEC. 1203. STATE PROGRAMS.

(a) State Level Activities.—Each State that receives a grant under section 1202(d)(1) may use not more than 5 percent of the grant funds for the costs of—

(1) administration; and

(2) providing, through one or more subgrants or contracts, technical assistance for program improvement and replication, to eligible entities that receive subgrants under subsection (b).

(b) Subgrants for Local Programs.—

(1) In general.—Each State shall use the grant funds received under section 1202(d)(1) and not reserved under subsection (a) to award subgrants to eligible entities to carry out Even Start programs.

(2) Minimum.—No State shall award a subgrant under paragraph (1) in an amount less than $75,000, except that a State may award one subgrant in each fiscal year of sufficient size, scope, and quality to be effective in an amount less than $75,000 if, after awarding subgrants under paragraph (1) for such fiscal year in amounts of $75,000 or greater, less than $75,000 is available to the State to award such subgrants.

SEC. 1204. USES OF FUNDS.

(a) In General.—In carrying out an Even Start program under this part, a recipient of funds under this part shall use such funds to pay the Federal share of the cost of providing intensive family-centered education programs that involve parents and children, from birth through age seven, in a cooperative effort to help parents become full partners in the education of their children and to assist children in reaching their full potential as learners.

(b) Federal Share Limitation.—

(1) In general.—

(A) Except as provided in paragraph (2), the Federal share under this part may not exceed—

(i) 90 percent of the total cost of the program in the first year that such program receives assistance under this part or its predecessors authority;

(ii) 80 percent in the second such year;

(iii) 70 percent in the third such year;

(iv) 60 percent in the fourth such year; and

(v) 50 percent in any subsequent such year.

(B) The remaining cost of a program assisted under this part may be provided in cash or in kind, fairly evaluated and may be obtained from any source, including other Federal funds under this Act.

(2) Waiver.—The State educational agency may waive, in whole or in part, the cost-sharing requirement described in paragraph (1) for an eligible entity if such entity—

(A) demonstrates that such entity otherwise would not be able to participate in the program assisted under this part; and

(B) negotiates an agreement with the State educational agency with respect to the amount of the remaining cost to which the waiver will be applicable.

(3) Prohibition.—Federal funds provided under this part may not be used for the indirect costs of a program assisted under this part, except that the Secretary may waive this paragraph if an eligible recipient of

funds reserved under section 1202(a)(1)(C) demonstrates to the Secretary's satisfaction that such recipient otherwise would not be able to participate in the program assisted under this part.

SEC. 1205. PROGRAM ELEMENTS.

Each program assisted under this part shall—

(1) include the identification and recruitment of families most in need of services provided under this part, as indicated by a low level of income, a low level of adult literacy or English language proficiency of the eligible parent or parents, and other need-related indicators;

(2) include screening and preparation of parents, including teenage parents and children to enable such parents to participate fully in the activities and services provided under this part, including testing, referral to necessary counseling, other developmental and support services, and related services;

(3) be designed to accommodate the participants' work schedule and other responsibilities, including the provision of support services, when such services are unavailable from other sources, necessary for participation in the activities assisted under this part, such as—

(A) scheduling and locating of services to allow joint participation by parents and children;

(B) child care for the period that parents are involved in the program provided under this part; and

(C) transportation for the purpose of enabling parents and their children to participate in programs authorized by this part;

(4) include high-quality intensive instructional programs that promote adult literacy and empower parents to support the educational growth of their children, developmentally appropriate early childhood educational services, and preparation of children for success in regular school programs;

. (5) include special training of staff, including child care staff, to develop the skills necessary to work with parents and young children in the full range of instructional services offered through this part;

(6) provide and monitor integrated instructional services to participating parents and children through home-based programs;

(7) operate on a year-round basis, including the provision of some program services, instructional or enrichment, during the summer months;

(8) be coordinated with—

(A) programs assisted under other parts of this title and this Act;

(B) any relevant programs under the Adult Education Act, the Individuals with Disabilities Education Act, and the Job Training Partnership Act; and

(C) the Head Start program, volunteer literacy programs, and other relevant programs;

(9) ensure that the programs will serve those families most in need of the activities and services provided by this part; and

(10) provide for an independent evaluation of the program.

SEC. 1206. ELIGIBLE PARTICIPANTS.

(a) In General.—Except as provided in subsection (b), eligible participants in an Even Start program are—

(1) a parent or parents—

(A) who are eligible for participation in an adult basic education program under the Adult Education Act; or

(B) who are within the State's compulsory school attendance age range, so long as a local educational agency provides (or ensures the availability of) the basic education component required under this part; and

(2) the child or children, from birth through age seven, of any individual described in paragraph (1).

(b) Eligibility for Certain Other Participants.—

(1) In general.—Family members of eligible participants described in subsection (a) may participate in activities and services provided under this part, when appropriate to serve the purpose of this part.

(2) Special rule.—Any family participating in a program assisted under this part that becomes ineligible for such participation as a result of one or more members of the family becoming ineligible for such participation may continue to participate in the program until all members of the family become ineligible for such participation, which—

(A) in the case of a family in which ineligibility was due to the child or children of such family attaining the age of eight, shall be in two years or when the parent or parents become ineligible due to educational advancement, whichever occurs first; and

(B) in the case of a family in which ineligibility was due to the educational advancement of the parent or parents of such family, shall be when all children in the family attain the age of eight.

SEC. 1207. APPLICATIONS.

(a) Submission.—To be eligible to receive a subgrant under this part, an eligible entity shall submit an application to the State educational agency in such form and containing or accompanied by such information as the State educational agency shall require.

(b) Required Documentation.—Each application shall include documentation, satisfactory to the State educational agency, that the eligible entity has the qualified personnel needed—

(1) to develop, administer, and implement an Even Start program under this part; and

(2) to provide access to the special training necessary to prepare staff for the program, which may be offered by an eligible organization.

(c) Plan.—

(1) In general.—Such application shall also include a plan of operation for the program which shall include—

(A) a description of the program goals;

(B) a description of the activities and services that will be provided under the program, including a description of how the program will incorporate the program elements required by section 1205;

(C) a description of the population to be served and an estimate of the number of participants to be served;

(D) as appropriate, a description of the applicant's collaborative efforts with institutions of higher education, community-based organizations, the State educational agency, private elementary schools, or other eligible organizations in carrying out the program for which assistance is sought;

(E) a statement of the methods that will be used—

(i) to ensure that the programs will serve families most in need of the activities and services provided by this part;

(ii) to provide services under this part to individuals with special needs, such as individuals with limited English proficiency and individuals with disabilities; and

(iii) to encourage participants to remain in the program for a time sufficient to meet the program's purpose; and

(F) a description of how the plan is integrated with other programs under this Act, the Goals 2000: Educate America Act, or other Acts, as appropriate, consistent with section 14306.

(2) Duration of the plan.—Each plan submitted under paragraph (1)(A) shall—

(A) remain in effect for the duration of the eligible entity's participation under this part; and

(B) be periodically reviewed and revised by the eligible entity as necessary.

(d) Consolidated Application.—The plan described in subsection (c)(1)(F) may be submitted as part of a consolidated application under section 14302.

SEC. 1208. AWARD OF SUBGRANTS.

(a) Selection Process.—

(1) In general.—The State educational agency shall establish a review panel in accordance with paragraph (3) that will approve applications that—

(A) are most likely to be successful in—

(i) meeting the purpose of this part; and

(ii) effectively implementing the program elements required under section 1205;

(B) demonstrate that the area to be served by such program has a high percentage or a large number of children and families who are in need of such services as indicated by high levels of poverty, illiteracy, unemployment, limited-English proficiency, or other need-related indicators, including a high percentage of children to be served by the program who reside in a school attendance area eligible for participation in programs under part A;

(C) provide services for at least a three-year age range, which may begin at birth;

(D) demonstrate the greatest possible cooperation and coordination between a variety of relevant service providers in all phases of the program;

(E) include cost-effective budgets, given the scope of the application;

(F) demonstrate the applicant's ability to provide the Federal share required by section 1204(b);

(G) are representative of urban and rural regions of the State; and

(H) show the greatest promise for providing models that may be adopted by other local educational agencies.

(2) Priority for subgrants.—The State educational agency shall give priority for subgrants under this subsection to applications that—

(A) target services primarily to families described in paragraph (1)(B); or

(B) are located in areas designated as empowerment zones or enterprise communities.

(3) Review panel.—A review panel shall consist of at least three members, including one early childhood professional, one adult education professional, and one or more of the following individuals:

(A) A representative of a parent-child education organization.

(B) A representative of a community-based literacy organization.

(C) A member of a local board of education.

(D) A representative of business and industry with a commitment to education.

(E) An individual who has been involved in the implementation of programs under this title in the State.

(b) Duration.—

(1) In general.—Subgrants under this part may be awarded for a period not to exceed four years.

(2) Startup period.—The State educational agency may provide subgrant funds to an eligible recipient, at such recipient's request, for a three- to six-month startup period during the first year of the four-year grant period, which may include staff recruitment and training, and the coordination of services, before requiring full implementation of the program.

(3) Continuing eligibility.—In awarding subgrant funds to continue a program under this part for the second, third, or fourth year, the State educational agency shall review the progress being made toward meeting the objectives of the program after the conclusion of the startup period, if any.

(4) Insufficient progress.—The State educational agency may refuse to award subgrant funds if such agency finds that sufficient progress has not been made toward meeting such objectives, but only after affording the applicant notice and an opportunity for a hearing.

(5) Grant renewal.—

(A) An eligible entity that has previously received a subgrant under this part may reapply under this part for additional subgrants. An eligible recipient may receive funds under this part for a period not to exceed eight years.

(B) The Federal share of any subgrant renewed under subparagraph (A) shall not exceed 50 percent in any fiscal year.

SEC. 1209. EVALUATION.

From funds reserved under section 1202(b)(1), the Secretary shall provide for an independent evaluation of programs assisted under this part—

(1) to determine the performance and effectiveness of programs assisted under this part; and

(2) to identify effective Even Start programs assisted under this part that can be duplicated and used in providing technical assistance to Federal, State, and local programs.

SEC. 1210. CONSTRUCTION.

Nothing in this part shall be construed to prohibit a recipient of funds under this part from serving students participating in Even Start simultaneously with students with similar educational needs, in the same educational settings where appropriate.

APPENDIX B: ADDITIONAL DATA TABLES

Exhibit B.1: Number of Projects That Submitted 1995-96 Even Start National Evaluation Data, by State and Type of Project (Referenced in Chapter 2)

State	State-Administered	Migrant Education	Tribal	Total
Alabama	13	0	0	13
Alaska	5	0	0	5
Arizona	8	0	1	9
Arkansas	11	1	0	12
California	47	0	0	47
Colorado	7	1	1	9
Connecticut	3	0	0	3
Delaware	1	0	0	1
District of Columbia	1	0	0	1
Florida	15	1	0	16
Georgia	12	0	0	12
Hawaii	1	0	0	1
Idaho	4	0	0	4
Illinois	24	0	0	24
Indiana	6	0	0	6
Iowa	6	0	0	6
Kansas	6	0	1	7
Kentucky	10	1	0	11
Louisiana	11	1	0	12
Maine	4	0	0	4
Maryland	10	0	0	10
Massachusetts	8	0	0	8
Michigan	17	1	0	18
Minnesota	5	0	0	5
Mississippi	12	0	0	12
Missouri	9	0	0	9
Montana	4	0	0	4
Nebraska	4	0	0	4
Nevada	4	0	0	4
New Hampshire	4	0	0	4
New Jersey	13	0	0	13
New Mexico	6	1	0	7
New York	35	0	0	35
North Carolina	9	0	0	9
North Dakota	4	0	1	5

(Exhibit continues on the next page.)

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Exhibit B.1: Number of Projects that Submitted 1995-96 Even Start National Evaluation Data, by State and Type of Project (Referenced in Chapter 2) (Cont'd)

State	State-Administered	Migrant Education	Tribal	Total
Ohio	21	0	0	21
Oklahoma	8	0	1	9
Oregon	7	0	0	7
Pennsylvania	21	0	0	21
Puerto Rico	18	0	0	18
Rhode Island	4	0	0	4
South Carolina	12	0	0	12
South Dakota	3	0	0	3
Tennessee	22	0	0	22
Texas	41	0	0	41
Utah	4	0	0	4
Vermont	4	0	0	4
Virginia	8	0	0	8
Washington	10	1	2	13
West Virginia	6	0	0	6
Wisconsin	13	1	1	15
Wyoming	5	0	0	5
Total	**546**	**9**	**8**	**563**

Note: A total of 576 projects operated the Even Start Program in 1995-96. Of these, 563 (98 percent) submitted data for the National Even Start Evaluation.

Exhibit reads: In 1995-96, there were 13 Even Start projects in Alabama, all of which were state administered.

Exhibit B.2: Number and Percent of Even Start Parents by Region, State, and Race/Ethnicity (1995-96, Referenced in Chapter 3)

Region/State	Percent of Parents						Number of Parents per State
	Asian Pacific Islander	American Indian	Hispanic	African American	Caucasian	Other	
Northeast Region							
Connecticut	5%	1%	47%	31%	16%	0%	111
Maine	4	1	0	1	93	0	91
Massachusetts	9	0	27	20	40	4	260
New Hampshire	4	0	13	0	83	0	78
New Jersey	1	0	46	37	15	1	420
New York	5	1	22	18	54	0	2,714
Pennsylvania	2	0	18	32	48	0	1,534
Rhode Island	13	1	63	8	14	0	83
Vermont	1	0	5	2	89	3	142
Northeast Region	**4%**	**1%**	**23%**	**22%**	**49%**	**1%**	**5,433**

(Exhibit continues on the next page.)

Exhibit B.2: Number and Percent of Even Start Parents by Region, State, and Race/Ethnicity (1995-96, Referenced in Chapter 3) (Cont'd)

	Percent of Parents						
Region/State	Asian/ Pacific Islander	American Indian	Hispanic	African American	Caucasian	Other	Number of Parents per State
South Region							
Alabama	0%	0%	5%	52%	42%	1%	586
Arkansas	0	0	14	39	47	0	952
Delaware	0	0	16	52	32	0	44
District of Columbia	2	0	63	34	1	0	321
Florida	1	1	24	43	30	2	1,820
Georgia	2	0	16	52	28	1	801
Kentucky	1	0	1	9	88	0	683
Louisiana	8	1	16	44	31	0	1,049
Maryland	1	0	13	52	33	0	345
Mississippi	2	0	1	71	25	0	898
North Carolina	1	0	13	52	34	0	293
Oklahoma	4	22	31	7	36	1	335
Puerto Rico	0	0	100	0	0	0	923
South Carolina	0	0	1	85	14	0	437
Tennessee	1	0	4	31	64	1	596
Texas	1	0	77	10	11	0	3,108
Virginia	0	0	4	46	49	1	378
West Virginia	1	0	0	7	91	0	242
South Region	**1%**	**1%**	**34%**	**33%**	**30%**	**1%**	**13,811**
Midwest Region							
Illinois	6%	0%	37%	25%	30%	2%	1,180
Indiana	2	0	7	31	59	1	263
Iowa	8	1	36	5	50	0	242
Kansas	3	6	40	12	38	1	491
Michigan	0	2	10	12	71	4	903
Minnesota	34	3	14	11	36	2	218
Missouri	8	1	4	47	40	0	466
Nebraska	11	3	43	10	33	0	157
North Dakota	5	52	1	6	34	2	149
Ohio	2	0	3	29	65	1	837
South Dakota	2	28	4	3	62	0	202
Wisconsin	27	10	12	10	40	1	599
Midwest Region	**8%**	**5%**	**18%**	**20%**	**48%**	**2%**	**5,707**

(Exhibit continues on the next page.)

Exhibit B.2: Number and Percent of Even Start Parents by Region, State, and Race/Ethnicity (1995-96, Referenced in Chapter 3) (Cont'd)

Region/State	Percent of Parents						Number of Parents per State
	Asian/ Pacific Islander	American Indian	Hispanic	African American	Caucasian	Other	
West Region							
Alaska	5%	26%	30%	0%	39%	0%	66
Arizona	1	6	87	0	4	1	495
California	9	3	77	4	6	1	3,239
Colorado	1	5	57	1	35	1	327
Hawaii	79	0	11	0	8	3	66
Idaho	2	0	61	1	35	1	205
Montana	4	43	10	1	42	1	108
Nevada	2	3	68	0	26	0	217
New Mexico	1	7	87	0	6	0	290
Oregon	3	2	58	2	35	0	222
Utah	9	20	50	3	18	0	384
Washington	12	12	46	15	14	2	485
Wyoming	1	4	30	1	64	0	91
West Region	**8%**	**6%**	**68%**	**4%**	**13%**	**1%**	**6,195**

Note: The numbers represent Even Start parents for whom race/ethnicity data were submitted. Percentages in each state row refer to the distribution of racial/ethnic groups within the state; the ***bolded*** *percentages refer to the entire region. Percentages of less than 1 percent are reported as 0 within each state.*

Exhibit reads: In 1995-96, for the 111 Even Start parents in Connecticut for whom race/ethnicity data were submitted, 5 percent identified themselves as Asian/Pacific Islander, 1 percent as American Indian, 47 percent as Hispanic, 31 percent as African American, and 16 percent as Caucasian.

Exhibit B.3: Number of Even Start Projects by Region, State, and Type of Community (1995-96, Referenced in Chapter 4)

Region/State	Urban	Rural	Mixed	Total
Northeast Region				
Connecticut	0	1	2	3
Maine	3	0	1	4
Massachusetts	4	0	4	8
New Hampshire	3	0	1	4
New Jersey	6	2	4	12
New York	15	3	15	33
Pennsylvania	8	5	8	21
Rhode Island	2	1	1	4
Vermont	4	0	0	4

(Exhibit continues on the next page.)

Exhibit B.3: Number of Even Start Projects by Region, State, and Type of Community (1995-96, Referenced in Chapter 4) (Cont'd)

Region/State	Urban	Rural	Mixed	Total
South Region				
Alabama	8	1	4	13
Arkansas	7	3	2	12
District of Columbia	0	0	1	1
Delaware	1	0	0	1
Florida	2	8	6	16
Georgia	6	2	4	12
Kentucky	8	2	1	11
Louisiana	7	3	2	12
Maryland	4	3	3	10
Mississippi	8	1	3	12
North Carolina	6	0	2	8
Oklahoma	5	1	2	8
Puerto Rico	11	4	3	18
South Carolina	8	2	1	11
Tennessee	15	2	5	22
Texas	16	7	18	41
Virginia	5	1	2	8
West Virginia	3	0	2	5
Midwest Region				
Iowa	2	1	3	6
Illinois	8	2	14	24
Indiana	3	1	2	6
Kansas	3	1	3	7
Michigan	9	2	6	17
Minnesota	0	1	4	5
Missouri	4	0	5	9
North Dakota	3	0	2	5
Nebraska	2	1	1	4
Ohio	10	3	7	20
South Dakota	1	1	1	3
Wisconsin	11	1	3	15

(Exhibit continues on the next page.)

Exhibit B.3: Number of Even Start Projects by Region, State, and Type of Community (1995-96, Referenced in Chapter 4) (Cont'd)

Region/State	Urban	Rural	Mixed	Total
West Region				
Alaska	4	0	1	5
Arizona	1	4	4	9
California	21	5	20	46
Colorado	4	1	4	9
Hawaii	0	1	0	1
Idaho	2	1	1	4
Montana	2	0	1	3
New Mexico	4	0	2	6
Nevada	3	0	1	4
Oregon	3	2	2	7
Utah	1	0	3	4
Washington	8	2	3	13
Wyoming	5	0	0	5

Note: The exhibit is based on data received from 551 projects that reported type of community information.

Exhibit reads: In 1995-96, three Even Start projects in Connecticut submitted evaluation data; one project from a rural area and two projects serving urban and rural communities ("mixed").

Exhibit B.4: Additional Criteria Used to Select Families Most in Need (1995-96, Referenced in Chapter 4)

Criteria	Number of Projects	Percent of Projects
Parent Characteristics		
Adult does not have GED	87	15%
Parent(s) receive public assistance (e.g., AFDC, food stamps, WIC, enrolled in JOBS program)	66	12%
Parent has low literacy level	65	12%
Parent is unemployed	52	9%
Parent has need or desire to improve parenting skills	31	6%
Parent is highly motivated and willing to participate in all core services	30	5%
Parent needs adult basic education	25	4%
Parent's TABE or CASAS scores are low	20	4%
Parent has a substance-abuse problem	18	3%
Parent has low-level or part-time employment	11	2%
Parent has a chronic mental or physical health problem	10	2%
Child Characteristics		
Child has special needs, disabilities, handicapping condition	90	16%
Child is within a specific age group	67	12%
Child qualified for free or reduced-price lunch	34	6%
Child enrolled in Head Start or other preschool program or early elementary program	16	3%
Child is developmentally delayed	15	3%
Family Environment		
Family was referred by school, social service agency, or collaborating partner	75	13%
Family has multiple children below age 8	60	11%
Family is homeless	33	6%
Family has history of domestic violence	32	6%
Family is isolated; lacks a support network	18	3%
Family has transportation needs	17	3%
Family lives in temporary housing or sub-standard housing	16	3%
Adult or child has health-care needs; family lacks insurance	15	3%
Family has more than one adult eligible for adult education	12	2%
Family is not receiving similar services from another program or agency	10	2%

Exhibit reads: In 1995-96, eighty-seven projects, or 15 percent, used "adult does not have a GED" as an additional criterion to target families most in need.

Exhibit B.5: Instructional Services Offered in Three Core Components (Average Across Reporting Project Sites, 1995-96, Referenced in Chapter 4)

Educational Area	Percent of Sites Reporting	Times Per Month	Hours per Month	Duration of Instruction in Months	Hours per Month of Home-Based Services	Hours per Year per Participant
Adult Basic Education (ABE)						
Beginning ABE (0-4)	75%	**12 times** (1-60)	**36 hours** (1-168)	**10 months** (1-12)	**4.1 hours** (1-37)	**369 hours** (10-1,848)
Intermediate ABE (5-8)	78%	**12** (1-60)	**38** (2-168)	**10** (1-12)	**4.0** (1-40)	**386** (18-1,848)
ASE/GED Preparation (9-12)	85%	**13** (1-60)	**40** (2-168)	**10** (1-12)	**4.6** (1-80)	**404** (20-1,848)
ESL	55%	**12** (1-80)	**33** (2-150)	**10** (1-12)	**4.3** (1-48)	**325** (4-1,500)
Parenting Education						
Parent alone	90%	**7** (1-80)	**11** (1-120)	**10** (1-12)	**2.9** (1-32)	**108** (2-1,440)
Parent and child together	90%	**8** (1-52)	**9** (1-120)	**10** (1-12)	**3.2** (1-50)	**99** (2-1,440)
Early Childhood Education						
Under age 3	80%	**11** (1-80)	**38** (1-252)	**10** (1-12)	**3.5** (1-126)	**391** (4-2,772)
Ages 3 and 4	90%	**14** (1-80)	**53** (1-252)	**10** (1-12)	**3.5** (1-126)	**547** (4-2,772)
Age 5	80%	**14** (1-80)	**56** (1-300)	**10** (1-12)	**3.3** (1-126)	**575** (1-3,300)
Ages 6 and 7	67%	**13** (1-210)	**62** (1-520)	**10** (1-12)	**3.4** (1-126)	**609** (1-5,720)

Note: The percentages are based on the 613 project sites operated by the 563 projects included in evaluation analyses. The range of responses from all sites reporting is indicated in parentheses.

Exhibit reads: On average, beginning ABE sessions were offered twelve times per month, thirty-six hours per month, ten months of the year, totaling 369 hours per year. On average, 4.1 hours of beginning ABE activities were conducted in participants' homes. Across the reporting sites, the hours offered annually for beginning ABE programs ranged from ten to 1,848.

Exhibit B.6: "Other" Reasons for Families Discontinuing Participation in Even Start (1995-96, Referenced in Chapter 5)

Reasons	Number of Families
Family-Driven Reasons	
Health problems: serious illness, injury, surgery, other conditions (141); problem pregnancy (38); mental illness (3)	182
Mother on maternity leave or choosing to stay at home with new baby	131
Lack of transportation	78
Family exited the shelter; family is homeless	75
Parent returned to high school; enrolled in community or four-year college, job training, vocational/technical program, etc.	45
Parent found a job; work schedule precludes regular participation	44
Child care or daycare not available or not affordable	39
Child removed from the home; placed in foster care; custodial parent gave up rights; child given up for adoption; eligible parent moved out	38
Enrolled but never returned or dropped out after first few classes	37
Enrolled in other programs	36
Unable to locate; address unknown	33
Parent received GED or is awaiting results; received regular high school diploma	28
Temporary leave of absence, e.g., during summer	24
Death of: parent (10), child (6), other (6)	22
Parent in jail	22
Parent(s) did not participate; parent refused to participate	21
Parent looking for work	20
Parent(s) earn living as migrant worker(s)	20
Child enrolled in regular preschool or kindergarten program	14
Family left the country; returned to homeland	13
Male spouse would not allow parent to participate	10
Scheduling conflicts	10
Program-Driven Reasons	
Even Start center or site closed down due to lack of funds	78
Scaled down services, e.g., discontinued literacy class; insufficient staff	67
Family no longer met eligibility criteria: child aged out (22); child too young (5); parent's TABE/CASAS scores too high (1); income too high (4); parent has a degree (1); Unspecified (14)	47
Program moved out of school area	18
Family dropped for misconduct, e.g., child attacked staff member; misused child care funds; non-cooperation	12
Referred family to another program	11

Note: Of the 29,607 families for whom we received the year-end status, 11,723 families (40 percent) had left Even Start during 1995-96. Projects reported "Other" reasons for termination for 918 families, or 8 percent of all families who left the program.

Exhibit reads: In 1995-96, 182 families left the Even Start program due to medical and health problems.

Exhibit B.7: Correlations Among Family Need Indicators (1995-96, Referenced in Chapter 6)

	A	B	C	D	E	F
A. Low income: Under $12,000 per year						
B. Low education: 9th grade or less	-.07					
C. Single parent	.43	-.15				
D. Receive government assistance and/or welfare as primary source of income	.49	-.06	.42			
E. Limited English proficiency	-.21	.36	-.30	-.27		
F. Four or more children below age 16 in family	-.05	.09	-.04	-.05	.09	
G. Child(ren) with special needs	-.01	-.01	.00	.06	-.10	.05

Exhibit reads: The correlation between (A) family income under $12,000 and (D) family receiving government assistance is .49.

Exhibit B.8: Solutions to Implementation Barriers (1995-96, Referenced in Chapter 9)

Improving Attendance (173 projects, 31 percent)
• Enforce mandatory counseling sessions to correct tardiness and/or repeated absences
• Reschedule classes at more convenient times; provide transportation
• Schedule special events during periods of low attendance to keep interest high
• If attendance falls below a minimum level, drop families from the entire program
• Immediately follow up on absentees
• Have adult students choose "attendance buddies" to follow up on absences
• Use orientation period to separate committed from non-committed participants and focus efforts on the former
Improving Retention or Motivation of Participants (157 projects, 28 percent)
• Give incentives (open house, back to school with free school supplies, transportation, meals, child care) to recognize participants' hard work and progress
• Provide transportation and child care; home tutors; flexible class times
• Provide rewards/support (recognition luncheon for GED graduates)
• Have frequent personal contact
• Adapt curricula and instruction to increase relevancy to families' cultural heritage; involve parents as helpers; offer choice of classes
• Target recruitment on smaller group of committed participants
• Require parents to participate in order for their children to receive services
Recruiting Eligible Families (121 projects, 21 percent)
• Go door-to-door; go to gathering places, like food banks, WIC clinics, state unemployment offices
• Use word of mouth/flyers
• Use interagency collaboration
• Use "model" Even Start families to recruit others to participate
• Emphasize recruitment when training staff
• Provide services in convenient locations; help with transportation
• Adapt services to participants' needs and interests

(Exhibit continues on the next page.).

Exhibit B.8: Solutions to Implementation Barriers (1995-96, Referenced in Chapter 9) (Cont'd)

Arranging or Providing Adequate Transportation (99 projects, 18 percent)
• Purchase large passenger vehicle
• Arrange for parents and children to ride public school buses
• Encourage car pools among families; reimburse parents for gas mileage; provide transportation stipends; join local community motor pool; help families to buy infant car seats
• Rent buses or vans from school district and local college; have staff members earn their CDL license.
• Arrange to use buses or vans owned by collaborating agencies; coordinate with other programs that have bus runs
• Move program sites closer to participants' homes and provide home-based services whenever possible
• Create the staff position of Transportation Aide to make arrangements on a case-by-case basis
• Form local transportation cooperatives; contract with the local public transportation system to subsidize fares for Even Start families; negotiate contract with local taxi company
• Offer driver education classes to Even Start parents and adults
• Have staff use their own vehicles to transport families
• Collaborate with public assistance office to provide Even Start families with bus tokens
• Expand Community Loan program to help families purchase cars
Obtaining Sufficient Financial Resources (87 projects, 15 percent)
• Conduct fund-raisers
• Share materials and staff with collaborating agencies
• Apply for other grants
• Collaborate with school district, other agencies, and state Department of Education in seeking additional funds for multi-agency model for service delivery
• Solicit local business and community organizations
Obtaining Adequate Facilities, Space, or Equipment (87 projects, 15 percent)
• Rotate children's play groups between clients' homes; provide education services in the home
• Scale down project model to fit with available sites
• Apply for additional grant funds from other state and federal agencies
• Access the Internet to increase technological capabilities
• Forge a relationship with Private Industry Council to have use of JTPA computer lab for ESL/GED training
• Arrange for reduced rent or donated space; reschedule classes to fit times when facilities and space are available
• Use other agencies' space as part of collaborative agreement
• Hold classes and events at public buildings, such as the community center, school, public library, and churches

(Exhibit continues on the next page.)

Exhibit B.8: Solutions to Implementation Barriers (1995-96, Referenced in Chapter 9) (Cont'd)

Coordinating with Other Agencies (74 projects, 13 percent)
• Initiate inter-school, inter-agency council
• Obtain a state grant to form an inter-agency council to serve "at risk" families
• Collaborate with other agencies in sharing staff, materials; work out in-kind contributions, share inservice training
• Ask state Department of Education collaboration specialist for help
• Make presentations to other agencies; serve on board and advisory committees to other agencies and invite their representatives to be part of Even Start board
Recruiting Families Most in Need (61 projects, 11 percent)
• Provide incentives
• Collaborate with other social service agencies
• Use the Head Start waiting list for leads
• Get referrals from school counselors and social workers
• Develop a "point system" to prioritize families according to needs
Understanding or Meeting National and Local Evaluation Requirements (54 and 28 projects; 10 percent and 5 percent)
• Attend conferences
• Hire an evaluation consultant
Finding Quality Child Care (53 projects, 9 percent)
• Help families arrange for child care in their communities; work with the local community to obtain more early childhood education facilities; distribute a list of qualified child/day care providers from Department of Human Resources
• Arrange for school district to open its child care program/center to Even Start parents
• Refer parents to other agencies that hold adult education classes at times when they can attend
• Apply for child care grant to establish on-site day care center; set up volunteer program using high school seniors and interns from community college as child care aides; arrange for Even Start volunteers and aides to provide child care for scheduled events
• Allow parents to bring their infants to class
• Subcontract out child care to existing providers; work with day care agencies that accept vouchers; provide families with child care stipend
• Provide core services in participants' homes
• Lower minimum age for children to enter Even Start
• Collaborate with other programs like Head Start that provide child care
• Work out plan for Even Start parents to share in caring for each other's children; help Even Start "graduates" to establish child care centers in their homes
Hiring and Retaining Qualified Staff (43 projects, 8 percent)
• Target or expand recruitment: hire graduates of Even Start, retired teachers, and part-time staff from collaborating agencies; go outside of local school district or community
• Make staff training and development a top priority; develop individual staff professional growth plans
• Implement a new staffing plan or staff restructuring; upgrade staff positions and realign responsibilities; revise job descriptions and pay schedules; cross-train staff; focus on team building; hire all new staff
• Intensify screening of job applicants; lengthen probationary period
• Collaborate with local school district, other programs, and universities to share qualified staff

(Exhibit continues on the next page.)

Exhibit B.8: Solutions to Implementation Barriers (1995-96, Referenced in Chapter 9) (Cont'd)

Meeting Social Service Needs of Families (38 projects, 7 percent)
• Collaborate with other local social service agencies to share referrals and staff inservice on social service needs; form an inter-agency council to address needs; form a consortium of social service agencies
• Refine the referral process; use computer system to link with other providers for referrals and intake; develop a family resource guide of available social services
• Develop collaborative support groups to help parents network together and within the community; invite collaborating agency representatives to Even Start parent groups
• Establish case management system; conduct on-going needs assessment of Even Start families; use the orientation period to assist families in accessing the social services to meet their needs
• Allow college students to do their family counseling internships at Even Start
Understanding and Working Within the Federal Guidelines (21 projects, 4 percent)
• Call state monitor for clarification
• Request copies of Adult Education Act, C.F.R.'s and *Federal Register* from the previous ED contractor
• Attend Even Start conferences pertaining to national evaluation, guidelines
• Network with other programs to share solutions and resolve questions
Working Within the Confines of the Local Model (17 projects, 3 percent)
• Redesign program to build in flexibility, e.g., increase or decrease frequency of the home visits, shorten class times to meet parents' scheduling needs
• Work directly with public school superintendent
• Keep in direct contact with state coordinator
• Consult a local evaluator
• Use fresh ideas from new staff members in interpreting the local model
Finding Adult, Parenting, or Early Childhood Education Services Locally (17 projects, 3 percent)
• Train Even Start instructors to teach adult education and parenting education for collaborating agencies as well
• Team with school district to provide adult basic education and GED classes at schools
• Collaborate with other local agencies and programs like Head Start that provide early childhood and parenting education
• Participate in recently implemented county-wide adult education and literacy program
• Within Even Start, integrate adult basic education into parenting education to compensate for lack of ABE in community
• Arrange to have access to local college's ABE Learning Center; use college students as adult education tutors
• Send Even Start staff to Head Start for training in early childhood education
Understanding or Working Within the State Guidelines (13 projects, 2 percent)
• Work with network of state directors' to improve communication with CDC Even Start office
• Work closely with the state Department of Public Instruction
• Use letters, phone calls and meetings to express concerns individually and as part of a regional group
• Rearrange daily schedule and staff duties to accommodate to state requirements

Exhibit reads: One frequently reported solution to improve families' attendance was to enforce mandatory counseling sessions to correct tardiness and/or repeated absences.

APPENDIX C: CONTENT VALIDITY OF MEASURES USED IN THE SAMPLE STUDY

Each of the measures used in the Sample Study has demonstrated reasonable content validity. The 32-item Preschool Inventory (PSI), for example, was developed in order to reflect exposure to instruction and assess children's readiness for schooling. The PSI "exhibits moderate to strong relationships with other measures of cognitive ability," including the Illinois Test of Psycholinguistic Abilities, the Denver Developmental Screening Test, the Peabody Picture Vocabulary Test-Revised, and the Wide Range Achievement Test (pp. 32-33, Abt Associates, 1991).

The Preschool Language Scale-3 (PLS-3) was developed to assess young children's receptive and expressive language, as well as behaviors that may be precursors to language in very young children. The PLS-3 assesses the language skills that previous research has indicated are critical to the development of facility in language (Zimmerman, Steiner, and Pond, 1992). Studies assessing the concurrent validity of the PLS have been conducted using such language-development focused instruments as the Receptive-Expressive Emergent Language Scale, Test of Early Language Development, Peabody Picture Vocabulary Test, with composite tests that include a language development component (e.g., the Battelle Development Inventory and the Minnesota Child Development Inventory), as well as with instruments designed to assess general cognitive ability, such as the Slosson Intelligence Test, Stanford-Binet Intelligence Scale, and the Kaufman Assessment Battery for Children (K-ABC). The PLS-3 has strong correlations (generally over .60) with tests of general cognitive ability and with the composite tests and more moderate correlations with the tests of language development (generally between .40 and .80).

The Home Screening Questionnaire (HSQ) was initially developed to assess "factors within a young child's home environment ... related to the child's growth and development" (Coons, Gay, Fandal, Ker, and Frankenburg, 1981). It collects information on a sample of aspects of a child's social, emotional, and cognitive development as reflected in the home environment. The HSQ shows strong correlations with the parent measure, the HOME Inventory.

Both the Test of Adult Basic Education (TABE) and the Comprehensive Adult Student Assessment System (CASAS) are used widely in adult education settings, chiefly because they are easy-to-use standardized measures. The CASAS assesses adults' capacity to apply basic skills to functional situations encountered in everyday life. The competencies assessed by test items are reviewed regularly and revised as appropriate. The CASAS has been found appropriate for a wide range of adult learners (Rickard, Stiles, and Martois, 1989). The TABE is an academically oriented test that measures student achievement in areas such as mathematics, reading, spelling and language—areas that are intended to match the curricula commonly covered in most adult

education instruction. The TABE is appropriate for higher level learners, and scores have been found to correlate with performance on the GED (CTB/McGraw-Hill, 1987).

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